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THE

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MEDICAL AND SURGICAL

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Original Didactic and Clinical Lectures.

ARTICLE I.

RAILROAD INJURIES AND OTHER CASES. Surgical Clinic of the Missouri Medical College at the City Hospital, by Prof. A. P. LANKFORD, of St. Louis. [Reported for THE JOURNAL.]

AMPUTATION.

GENTLEMEN:—You have seen this patient before. Ten days ago he was admitted to this hospital on account of an injury of the foot. The foot and ankle were caught in the belting of a large wheel, and the entire covering, plantar and dorsal literally and completely torn away and stripped up as high as three inches above the ankle-joint. As it did not seem to be much contused, Dr. Dean, in the true spirit of conservative surgery, carefully replaced it and stitched it up neatly, in the hope of saving the part—one of so much importance to a poor laborer. You will recall that when he was first introduced to you three days afterward, the entire mass was gangrenous—dead or dying. Still, in the hope that some parts might be saved from the general wreck, and become cicatrizing centers in the future, we made free incisions in every direction to insure thorough

drainage, and thus prevent local inflammation and blood-poisoning, and, dressing it antiseptically, directed a sustaining treatment, hoping for the best, but, as I warned you at the time, fearing that the poor fellow might yet have to lose his limb to save his life. This is one of the painful realities of your profession which you have had to confront pretty often recently. You remember the boy Harry, twelve years of age, who one month ago had both legs crushed by the wheels of a railroad coach; and only ten days ago little Edward, only eight years old, whose left ankle and right leg were run over in a similar manner, were brought to this hospital to be cured, limbs and all. Their friends even seemed to expect such a result. In such cases the experienced eye of the surgeon soon detects the incurable mutilation, and decides upon the means best calculated to save life. You will remember that I told you then, with regard to the question of amputation for injury, that the operation as to time was divided into "primary," "intermediary" and "secondary," and that statistics gave conclusive evidence in favor of the first (primary), and next to "secondary," the "intermediary" being attended with the greatest mortality. You know what these expressions mean—that the "primary" is where the operation is performed soon after the injury and before inflammation begins, say within the first thirty-six hours; the "intermediary" is from the beginning and during the inflammation and consequent "traumatic fever," a very uncertain period, its duration being dependent upon the severity of the local process, and the constitution of the patient; and the "secondary" at any time after suppuration has been established. Such a division is not restricted to gunshot wounds, but is convenient and appropriate as a general rule. And let me repeat again, that if amputation is proper or necessary, the sooner it is done the better for the patient. We are taught to always wait for "reaction" if there is "shock," for the return of color to the blanched cheek, warmth to the surface and extremities, pulse to the wrist, and conscious intellection to the bewildered or delirious brain, and many a surgeon has waited in vain. His patient has succumbed when he might have recovered. I speak, of course, relatively. In my opinion there is too little qualification in this broad, comprehensive injunction. It is often better that you should remove at once a crushed and mangled extremity rather than permit it to remain a constant source of profound irritation and consequent

exhaustion of the nerve centers, making reaction impossible. And this seems in accordance with a sound analogy. What is reflex paraplegia but central exhaustion from peripheral irritation, the persistent transmission of impressions by afferent nerves to the spinal ganglia until their power of responding is gone, for a time at least, and motion ceases in the muscles dependent on them. A dislocated womb, a stone in the bladder, ascarides in the rectum, etc., now and then cause loss of power over the lower extremities.

But such agents are mere trifles when compared with the bruised, torn and pulpified nerves of a whole limb, aggravated with every move by the rough fragments, and sharp serrations of broken bone. By removing this the patient exchanges a hopeless, mischievous mass for the smooth cut surfaces and neatly adjusted flaps of a "stump," made comfortable and protected by every possible mechanical contrivance. He can surely bear up under the operation—as well as the presence of the crushed and comminuted limb. The procedure of removal cannot depress in the same space of time more than the contact of the injured, mutilated nerves of the part, and then you have reduced the irritation to a minimum, and the reaction comes on once and for all. On the other hand, you wait, and supposing his vital forces and power of resistance to be sufficient, "reaction" follows the "shock" and is "well established." You now amputate, and the "shock" of the operation succeeds to the "shock" of the injury. In the midst of the excitement and commotion of her first rally from the terrible stroke, and while contemplating the ruins with dismay, and mustering her forces to clear away the rubbish and repair the injury, the system thus all unprepared receives the second blow, and must now recover from two shocks instead of one. You can partly understand how the stunned and half-conscious centers should be little affected when not in a condition to receive and respond to impressions? From such considerations to fortify our experience we concluded that it was best to amputate the little fellow's legs soon after his admission. It was the suggestion of my friend, Dr. Dean, in which I fully concurred; and the result has justified the practice. A double amputation is a severe ordeal at the best, and yet no case, even the most favorable, could proceed more satisfactorily and beautifully. In the other boy's case we followed the same rule with the right leg, but deeming it possible to save the other, yielded to the entreat-

ies of his parents, and made the attempt with the great advantage antiseptics give us. But it was only a few days when its condition unmistakably declared that it was hurt past recovery. Then we amputated, and although his age and strength seemed in his favor in the beginning he has not done nearly so well. The first stump is progressing fairly, but the last operation has been followed by sloughing of one of the flaps, while his general condition has been anything but good for several days. The inference is obvious; for while I shall always, by precept and example, try to impress you with the fact that you should never amputate when it can be avoided, you see in this case an illustration of the value of early and prompt action.

Now, let me again call your attention to the patient whose right lower limb we amputated through the thigh. This was for disease. He had an abscess of the upper end of the tibia, then destructive arthritis, with the leg and lower part of the thigh ploughed up by suppurating tracks. He had been treated in another hospital for abscess of the leg, and not until he came here was it discovered that the joint was involved. Every effort was made to save the extremity, and when we found this hopeless, prepared to excise the knee-joint, although he is much on the shady side of forty. Before beginning the operation he was warned that when the parts were exposed by the preliminary dissection their condition might necessitate amputation. The apprehension was realized, and much against his inclination it was cut off as near the joint as possible, in order to retain good coverings and sound bone for the stump. I pointed this out at the time, spoke of the greatness of conservative surgery (why we had been baffled in it in this case), and then some of the methods by which amputation is performed. And here I will repeat that had it been discovered at first (before he came here) that the abscess of the leg and persistent suppuration following it was symptomatic of the abscess of the upper end of the tibia, his limb might have been saved; and I say this, not in a spirit of criticism, but that you may profit by this fact in the clinical history of the case. Never rest satisfied when dealing with an obstinate suppuration like this has been, until you get to the root of the matter, until you discover the starting point, the first cause, the primary inflammation nest from which it springs, and is, probably, still kept going. Make free incisions and be free with finger and probe (when practicable).

The propriety of amputation being concluded, you have these aims—to preserve the longest leverage consistent with a good covering for the stump. This is the test of the method of operation as to the ultimate result. The last is to provide for thorough drainage, and thus prevent destructive inflammation and blood-poisoning—incidental wound disease. Decided by such considerations we must give the preference to the anterior flap over the others mentioned, and all which you have now seen executed. We cannot always choose, however. Now and then the soft parts are so irregularly torn and bruised that we are glad to get a covering from any direction. Such cases test our ingenuity and resource. Remove all badly injured tissue but no more, always providing for drainage. Preserve a good covering for the stump, but not at the expense of drainage. In operations for the removal of disease there is generally more latitude for choice. When thus favored, make a good covering for the bone, of integument, so shaped that the scar will be upon the side of the limb, instead of in the end of the stump; that it will not be adherent to the bone, but move freely over it; that it will not act as a receptacle, a bag to catch discharges (pus, etc.), but covering and protecting the wound from atmospheric contact, at the same time permit the constant, thorough escape of all fluids. For such an operation we are principally indebted to such men as Carden, Teele and Lane, but as to detail, mainly Carden. The last named gentleman formed "a rounded anterior flap of integument only, without any posterior flaps, and retracting the soft parts somewhat from the bone before dividing it with the saw, thus forming a flat-faced stump with a bonnet of integument to fall over it."

Notwithstanding the admirable results obtained by this gentleman, both in safety to life and the amount of pressure that can be borne by a stump so formed, which he gave to the world about the year 1856, and which has been often corroborated by others since; and, notwithstanding its obvious simplicity and excellence, I must advocate it before you to-day. The only serious objection is the liability of so much integument as the anterior flap inclines to slough from insufficient vascular supply. This may be obviated by making the anterior flap about as long as two-thirds of the diameter of the limb, including all the fascia and a little muscle, if there is any at the point, and a posterior flap of integument about one-third the length of the anterior. This general plan is the best for any portion of the lower ex-

tremity. In both the leg and thigh, so direct your incisions as to provide for the contraction of the long stout muscles of the "calf" and posterior portion of the thigh that all the tension upon the anterior flap covering is prevented. See to it that no pressure upon the stump is made by the dressings, that the circulation is left free and uninterrupted, and surrounded with sufficient warmth. Such precautions obviate the sole objection to this method of amputation. It is not denied that the final result gives the patient a far better stump than the others. Being covered by the natural integument, the scar, upon its posterior aspect, thus eventually becomes, by pressure and friction, thick, brawny and hard, like the palm of the hand and sole of the foot of the laborer—capable of enduring, without pain, the pressure of an artificial limb fitting to the end of the stump, and enabling the patient, finally, to walk without other aid than a cane. Some of them even dispense with this.

During the present course I shall be able to illustrate this to you with more than one patient, even in amputations of the thigh. The scar in the end of the stump and generally adherent to the bone in both the circular and ordinary flap methods, generally makes an artificial limb a most imperfect substitute, worn with difficulty, atended with pain and followed by disease which may require a second amputation. The same general principle may be applied to the upper extremities. Another merit which this method possesses over all others is the facility afforded for antiseptic treatment, upon which the life of the patient, as well as a good stump, may depend. Of the value of antiseptic methods I will speak presently.

We will now give our patient ether and amputate his leg just above the junction of the middle and lower thirds by the method just described. (The patient being completely anæsthetized the amputation was made upon the plan above mentioned. He reacted well. The operation was made in the "carbolic spray," and the stump dressed antiseptically, drainage tubes being left between the flaps.)

[TO BE CONTINUED.]

Original Contributions.

ARTICLE II.

THE HYSTERICAL SIMULATION OF ORGANIC NERVOUS DISEASE.

By ALLAN MCLANE HAMILTON, M. D., of New York, Visiting Physician to the Hospital for Epileptics and Paralytics, the Randall's Island Idiot Asylums, etc., New York City.

The connection between certain forms of hysteria and organic nervous diseases of well-established character is beginning to receive the attention it deserves, and the impetus given to this branch of study, especially by Charcot [1] and other French observers, is indicative of its importance. It was this writer who first traced the probable relationship of hysterical contractures and disease of the lateral columns of the spinal cord, and his valuable autopsy established the existence of primary symmetrical sclerosis in a case of this kind. Seguin and myself have observed hysterical symptoms in certain forms of hemiplegia, while the existence of exaggerated emotional states with cerebral tumor have been fully recognized [2]. In cerebral syphilis I have on two occasions found quite pronounced hysterical attacks, which recurred after slight excitations. It is not of these manifestations that I propose at present to speak, for when the diagnosis of organic disease is made, the appearance of hysterical symptoms may only be regarded as interesting clinical features, and rarely affect diagnosis; but when I say that it is possible for organic disease to begin with hysteria, or for hysterical symptoms to counterfeit the true evidences of organic nervous disease so closely as to almost defy detection, I think I do not speak of improbabilities.

During the past three or four years I have occasionally encountered examples of this class which were puzzling in the extreme, and I am convinced that the unwary practitioner may be sometimes easily led into the commission of a blunder. Cases of

1, *Gaz. Hebdomidaire*, 1865, No. 7.
2, *Brain*, April, 1878.

hysterical trouble expressed by disorders of motility, either paralysis, tremor or spasm, are sometimes very difficult to diagnose. A woman of middle age presented herself at the Out-Patient Department of the New York Hospital, several months ago, suffering with a rather violent rythmical tremor of the head and both hands, and accompanied by no abnormality of sensation. This tremor was quite persistent, and was markedly increased in volitional efforts. When she carried her handkerchief to her face, the hand shook more violently as she neared the accomplishment of the act than it did in the beginning. When carefully examined by Dr. Kinnicutt, who was present at her first visit, and myself, there seemed to be a possibility that her disease was a multiple cerebro-spinal sclerosis. Her face bore the particularly anxious expression described by writers upon the subject, and she sat bent forward, her head in advance of her body. There was no festination when she attempted to walk, and, from the absence of other signs, I did not feel at all sure of my diagnosis, but felt confident that there was some organic disease. When she next came, a week later, she was exceedingly emotional, and her movements were the same as before; and to these symptoms was added that of subjective numbness of the fingers. I might mention that the tremor was so violent that her voice was affected, and she talked very much as a person would who was chilled through. At her third visit, her only symptom was the emotional excitement, the tremor having *entirely disappeared*, and she was perfectly quiet until I asked her some question regarding its cessation, when it it returned with redoubled violence, and on my questioning her closely, she became very indignant. A careful examination revealed some left sided ovarian hyperæsthesia. She was, I afterwards learned, committed to an asylum for hysterical insanity. Strangely enough in this case there was atrophy of one optic nerve, and had I noticed this feature earlier, I should have been more ready in the begining to suspect sclerosis as a lesion.

Various forms of hysterical paralysis, especially of a paraplegic form, may simulate the organic varieties very closely. Miss. E. was a patient of this kind who during the existence of hysterical paraplegia presented urinary and rectal disorders, which, if taken into account with her other troubles, might lead a medical man who should see her for the first time to call her ailment something more serious than it really was. At this time her loss of

power was complete, and *through disuse* her limbs had become greatly atrophied; indeed there were contractures of the tendinis achillis of both legs, anaesthesia and analgesia, so that a pin might be thrust into the muscular tissue of the leg without producing pain.

For a period of a month there was not only incontinence of urine but involuntary stools as well. At the end of this time the functions of the bladder and rectum became perfectly normal. From the fact that the urine discharged was inoffensive, perfectly clear and quite copious, that there was no ammoniacal odor, and that the stools were watery; that ovarian hyperæsthesia existed, and that before this time a great variety of hysterical symptoms had been expresed, entirely did away with the chance of error in diagnosis.

In other cases the difficulty has been greater, for instance Webb [3] reports a case of hysterical locomotor ataxia which defied successful investigation for some time. The patient was a woman aged 35 years, who had suffered from menstrual troubles for a long period, and with these there were pains of various kinds in the back and legs, with the constricting band and a certain amount of anæsthesia. She had lost control of the bladder and rectum, and the urine contained some albumen. She could not stand and would fall if not supported, and when she walked her feet were thrown out, and there was marked inco-ordination of muscular movements. A year after the commencement of her trouble her fingers became stiff and powerless. When her mind was directed from her condition, her back pain would not be complained of, and she could bear quite decided pressure on the vertebral spines. Somewhat in doubt as to her condition, Dr. Da Costa was called in consultation, and pronounced the case one of hysteria and such a diagnosis was verified by the fact that but feeble contractions followed electric stimulation of the muscles, which is the case in some forms of old hysteria, while in locomotor ataxia there is marked elevated electric irritability. Great improvement immediately followed treatment, which was still more decided when the menses were re-established.

In a hysterical malingerer I have witnessed symptoms which were for a time very suggestive of locomotor ataxia; there was absolutely no atrophy of the optic nerve, however, and there was

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3. *Amer. Jour. of the Med. Sciences, 1876, p. 119.*

an assumed loss of power when the patient's muscular strength was tested, and a week after the first examination the whole character of her gait was changed; it becoming a spurious paraplegiform walk instead of an ataxic effort.

Last Fall, in consultation with Dr. J. P. P. White, of New York, I saw a man who presented a remarkable collection of nervous symptoms. He had been rather unsuccessful in some business affairs in the West, and keenly felt his embarrassment. On the way from Chicago he was seized with convulsions of a violent kind, and remained unconscious for some hours. When I visited him at his hotel I found him surrounded by friends who were doing their best to keep him quiet, and the efforts of two strong male nurses were almost insufficient to confine him to the bed. He was a powerful, muscular young man of about thirty-five, showing no evidence of exhaustion, nor disease of any kind. I found him in a condition of opisthotonos, the arc being greater than I had ever witnessed it before. The head was buried in the pillow, his face was flushed and swollen, and he sweated profusely. His eyes were staring and uncovered by the lids, while the pupils were widely dilated. The convulsions, at first tonic, and shortly afterwards clonic, lasted about two minutes and there was afterwards a period of relaxation. The slightest jar of the bed or attempt to arrange the bed clothing precipitated a fresh attack. He had been in this condition for nearly twenty-four hours before I saw him, and had neither eaten nor given any intelligible sign of consciousness, except once, when he called "father," although there was no external appearance of unconsciousness, but the patient rolled his eyes about occasionally, and his face bore an expression which suggested that he desired to communicate, but could not. The case was at first puzzling, and suggested the idea that it might be either tetanus or strychnia poisoning. These were disposed of by the absence of traumatism and endemic influences; by the fact that the temperature was not especially high; that there was no trismus; that his trouble had lasted too long for strychnia poisoning—but the most striking proof of all, in regard to the real nature of the case, was the fact that the convulsions disappeared almost as if by magic when it was said in his hearing that the doctor had pronounced his trouble hysteria, and when he was given a mixture of assafœtida. The supposed rarity of male hysteria in general, and of this kind

in particular, would, in such a case, be likely to throw one off his guard.

There are many other forms of trouble which might be alluded to, but I forbear to weary my readers with their recital. One case, however, is worthy of mention because it is extremely rare. I speak of hysterical chorea. Several cases have recently been recorded, one by Cordly Bradford.[4]

In this case, who was a girl nineteen years of age, there were extensive movements, but none of the facial muscles. There was tenderness of the left ovary, and pressure relieved the irregular movements to some degree. In such cases the chronic movement occurred with well pronounced hysterical symptoms. In a personal example the first manifestations were those of an ordinary chorea, and afterwards there were developed very decided convulsions and other hysteroid symptoms.

Fanny McC. is a cloakmaker nineteen years of age. After a day spent at a picnic, and attended by a great deal of excitement, she became "nervous," irritable, and refused food. A day or two later she began to "twitch," and well marked chorea appeared; not only were her hands affected, but her mouth moved as well. This continued for several weeks; she was meanwhile treated by her family physician. At the end of this time she should have menstruated, but did not, and suffered greatly from pain. The nervous symptoms now underwent a decided change. She became almost maniacal, threatened suicide, and other violence, had hallucinations and disturbed the peace of the family most thoroughly. At the invitation of Dr. Stuyvesant Morris I went to see her, and found her rolling on the floor in a semi-nude condition, talking incoherently, and beating her head against the boards. Her whole body was agitated by exaggerated choreic movements, which were incessant. When I next saw her, her trouble had undergone a change, so far as the mental condition was concerned, but her movements were quite violent. She could talk, but her speech was interrupted and explosive. There was gradual improvement when her uterine condition was treated, and though emotional and excited, she is now much better. There was absolutely nothing in the beginning to indicate the real nature of her chorea, and until the development of her more pronounced symptoms it presented nothing which differed from an ordinary case of chorea.

4. *Br. Med. Jour.*, Oct. 12, 1878.

The development of real organic disease after a continued hysterical condition is, I am sure, quite possible, and I do not fully believe in the frequency of sudden cures after some particular hysterical train of symptoms have lasted for years. From personal observation of one case in particular I have no doubt but that a degeneration of the lateral column has followed hysterical paralysis and contracture of a lower extremity. At first in this case there was an uncomplicated volitional paralysis, an ordinary hysterical paralysis, but disuse of limbs after years spent upon a couch have brought more serious trouble, such as rigidity at the ankle and knee-joint, and deformities overcome only with difficulty by passive motion and retraction of the heel, as well as a very decided tendon reflex, and other peculiar evidences commonly seen in spastic paralysis. As to convulsive affections of hysterical character, I think the literature of hystero-epilepsy furnishes us with enough examples of developed convulsions as a result of the primary trouble to prove the truth of what I suggest. These are but two varieties of confirmed disease, and doubtless there are many others.

In our examination of suspected cases we must be governed by certain peculiar features of hysteria, some of which have been recently discovered. I will not go into the question of the diagnosis of special symptoms, for this would lead to an interminable discussion, but I would call the reader's attention to the fact that in cases of this kind we rarely find any of the more pronounced symptoms of confirmed organic disease. As those which are absent I may allude to cranial nerve paralysis. I do not know of such a condition as hysterical ptosis, though diplopia is an occasional, but very rare symptom, and like many others of the same order, is liable to be a hysterical manifestation. Amaurosis and amblyopia are frequently hysterical, but in neuritis of the optic nerve and its consequences—disk atrophy, choked disk, or other retinal changes—are never found in hysterical subjects, except in rare coincidences. Strabismus may be hysterical, but in connection with other cranial nerve troubles is indicative of serious organic disease. As to pain as a symptom we can say but little, for dysæsthesæ of various kinds are bewildering, and except for other evidences of disease, it can have alone but little significance. The pure hysterical sensory disturbances are notably the hyperæsthesæ, and deep pressure does not produce anything like the discomfort of light contact. Atrophy of mus-

cular tissue can only be that which accompanies inactivity, and the atrophy with hysteria is never confined to special groups; so if we find such picked out ("dissecting atrophy" as it were), or if the extensors be alone involved, we need have no trouble in distinguishing true spinal disease from the condition under discussion. The muscles respond invariably to electrical currents in hysteria, unless the paralysis has lasted for a long time, and even then there is always a response of some kind. So disease of the anterior columns of the end may be excluded, in which the electric muscular contracticity is lost.

The convulsions or spasmodic movements of the hysterical affections need not be confounded with those of the well regulated and defined affections which they symptomatize, for the former are decidedly irregular or *bizarre*, and are neither constant, nor as a rule exactly alike at different times. The *chorea* of hysterical origin is too violent, and attended by too much emotional excitement. The *tremor* rarely lasts when the patient's attention is diverted, and the *contractures* disappear when she performs some voluntary movement, which brings her comfort, for instance, when she changes her position.

Coupled with these evidence we must always fully appreciate the sex of the individual, and if a woman we should be more than ever on our guard.

The existence of uterine or other like ovarian disorders and tenderness, should also be taken into account. So too, the false perception of color, the patient often reversing the primary color, saying that everything appears to be of the same hue is suggestive of hysteria. Within a short time I have seen a case in consultation with Dr. Satterlee at the New York Midnight Mission, which at first appeared to be one of specific epilepsy which had passed into the status epilepticus, as the patient had had within a week many epileptical attacks, had been seemingly delirious, had complained of intense headache, and as she was formerly a prostitute the inference of syphilis was quite probable, and more strangely born out by the appearance of an erythema upon the face and chest. She had had vomiting which was apparently cerebral, and when we saw her she complained of intense headache.

The history of irregular menstruation, with very great ovarian tenderness, so great, in fact, that the weight of the bedclothes could hardly be borne, and slight pressure of the hand caused

intolerable pain; the passage of large quantities of limpid urine, the normal dilatation of the pupils, and the appearance of the eyeballs, which were rolled upwards, all tended to remove any suspicion of true epilepsy.

The temperature had not advanced above 100° F., and the pulse was excited to a moderate degree. Her incoherent talk even had a certain connection after all, and then was decided "method in her madness." This patient "saw" only *yellow*, every fabric in the room—our faces, the walls and ceilings, all appeared to her to be of a bright yellow color. She became suddenly well, the marked spots of erythema fading out and remaining absent until a week ago, when her menstrual period again came around, and with it an hysterical attack. The spots on her face and chest reappeared, and remained of a livid color until the nervous excitement subsided.

There are many cases of this kind, to which I have alluded in this paper, which should be carefully and patiently examined before a diagnosis is decided upon and announced, and I believe that numerous examples of so called organic neuroses are supposed to exist, which are after all examples of unusual hysteria.

No. 2 East 33d St., New York.

ARTICLE III.

OBSERVATIONS ON YELLOW FEVER. By A. HAUSMANN, M. D., of St. Louis.

Notwithstanding that from time to time great epidemics of yellow fever have visited this continent, in our part of the country it has fortunately been always so rare that quite a number of physicians, perhaps the majority of them, have never had an opportunity for personal observation. During this year, however, through a coincidence of circumstances, the early outbreak, the violent character of the plague, and the extensive communication with the South by rail and river, a larger number of sporadic cases has been imported to St. Louis than perhaps ever before. The erection of quarantine against the infected districts, connected with a hospital for the reception of the sick taken from the boats and picked up in town, furnish some valuable material for observations on the disease in all its different stages.

Acting as physician under that institution, and, as such, being among the small number to whom this opportunity was confined, I should not think it proper to withhold from the profession the results of some of these observations, although they may lack perfection in more than one point, owing to some very material difficulties. I trust to the sound judgment of our profession in scientific matters, that no one will expect any new theories as to the cause, character or treatment of yellow fever from a fortnight's experience on a small number of cases, but simply a contribution of the facts observed.

In the following, I give the history of five typical cases terminating fatally and one case of recovery, all coming from the South, two by railroad, four by boats.

Chas. N——, æt. 26, admitted September 8th. Says he did not feel well for the last ten days, but on the 3rd inst. took sick with fever; had pains in the lumbar region. At present he only complains of tenderness in the stomach, but does not vomit; tongue coated in the middle, borders red; eyes slightly injected and a little yellow; temp., 100.9°; pulse, 92. A dose of calomel

and oil ricini were ordered, and afterwards 10 gtt. of tincture digitalis and 5 grs. iodide of potassium every two hours.

7TH, A. M.—Temp., 99.2°; pulse, 84. Had two stools during the night, and passed a quantity of light orange-colored urine containing much albumen. Had frequent vomiting of limpid fluid. Medicine and extract of beef only given by enema. Mustard plastor on the epigastrium, and repeated foot baths.

7TH, P. M.—Temp., 101°; pulse, 120; patient very restless, delirious, later in the evening, raving at intervals; had to be held in bed. About 10:30 P. M., subcutaneous injection of morph. sulph. $\frac{1}{4}$ gr. Quiet thereafter, pulse remaining the same during the night; respiration very quick; temperature decreasing.

Patient died on the morning of the 8th inst., in profuse perspiration, the sixth day of his sickness.

W. I. W——, æt. 26 years, left Memphis, September 4th. While on the train, about six hours before his arrival in town, he was suddenly seized with chills, fever, pains in his forehead and back. On the morning of the 5th he called for medicine at the Dispensary and was sent to the Hospital. Patient exhibits a high degree of prostration; his gait is unsteady and slow, and when roused from his drowsy sleep answers questions with apathy and indifference. Conjunctivæ much injected and distinctly yellow, which, together with a vacant glare of his flushed face, gives him a peculiar aspect. Tongue coated dirty brown; great tenderness in the epigastric region. Urine contained albumen. Temp., 104°; pulse, 96 to 100. During the next two days frequent vomiting; all symptoms aggravated except temperature and pulse, which are reduced to 102.5° and 64 on the morning on the 8th, when the first signs of black vomit appeared. Towards the evening the temperature rose steadily, and reached 105° at midnight. Applications of cold sheets brought it down, but did not awake the patient from a deep stupor, in which he died the next morning, the fifth day of his illness.

P. M——, æt. 35 years, admitted September 13th, fell sick on the 9th with chills, little fever, pains in head and back, frequent vomiting and great weakness. Temp., 100°; pulse, 60 to 64. On examination nothing abnormal except some tenderness around the umbilical region. No injection and coloring of the eyes. While being examined he suddenly complains of pains in his legs, and soon after vomits a liquid looking brown from

numerous dark membrane-like particles suspended in it. Calomel and oil ricini.

14TH, A. M.—Had one passage during the night of gray color, but no urine. Has still some pain in the lumbar region; vomits everything he takes. Temp., 100°; pulse, 68. In the afternoon a catheter was introduced and about an ounce of light orange-colored urine obtained, which contains a large quantity of albumen. Temp., 100°; pulse, 60; respiration, 24. During the night patient is wrapped up in hot wet blankets. Champagne given freely, and jaborandi gtt. every two hours, injected subcutaneously. The same drug was administered the next day in combination with digitalis and iodide of potassi by mouth, the vomiting having ceased entirely.

15TH, A. M.—Warm hip baths are added to the treatment. Towards evening patient is very restless and delirious; extremities cold, skin moist. At 8 P. M., temp., 105°; pulse, 100; easily compressible; respiration between 40-50. Dies in profuse perspiration between 9 and 10 o'clock, the seventh day of his sickness.

C. H. F——, æt. 25 years, admitted September 15th from a boat. Sick since the morning; one chill; pains in the supraorbital, but particularly in the lumbar region. Tongue slightly coated; nothing peculiar on examination. Temp., 101.5°; pulse, 88. Ordered calomel and oil ricini.

16TH, A. M.—Patient slept well; did not complain about any pain; had several passages during the night and voided some urine, which does not contain the least sign of albumen. Temp., 102°; pulse, 88; tongue little more coated than the day before. Patient was considered out of danger; no medicine given but was advised to keep quiet and to take nothing but a little milk and lime water. At 10 o'clock, however, he began to grow worse. The pains in the forehead and across his back returned more vehemently; coughing and deep respiration caused pain; the stomach and the tongue were thickly coated. P. M.—Temp., 104.5°; pulse, 92. Three doses of 10 grs. of quinine were given; the last one he vomited.

17TH A. M.—Temp., 104°; pulse, 80; patient was restless; tenderness around the umbilicus; no vomiting; urine a little turbid, containing much albumen. Quinine in emulsion with subnitrite of bismuth, 40 grains in a two ounce mixture, a teaspoonful

every hour. 6 P. M.—Temp., 104¾°; pulse, 76. At 7 o'clock P. M., an hour after he had taken the second dose, patient vomited a limpid fluid, specked with blood.

18TH, A. M.—Temp., 102.5°; pulse, 76; felt easier and slept much better than he did the night before; vomited twice, the liquid being mixed with dark flakes; complains of tenderness over the stomach and a feeling of pressure over the lower part of the abdomen; had one operation and passed water during the night. P. M.—Has not vomited during the day; is quiet, sleeping most of the time.

19TH, A. M.—Temp., 102°; pulse, 96; had black vomit several times during the night; became unconscious towards the morning and died before noon, the fifth day from the beginning.

W. B——, aged 28; admitted Sept. 15th; taken from the same boat as Case IV. Sick since the 13th with chills and fever; pains in the forehead and back; vomited after taking a dose of mustard; face red, flushed; eyes much injected; tongue coated; pain at first only in the left hypochondrium, in the evening over the whole epigastrium; temp., 102.5; pulse, 92; ordered quinine, five grs. every hour.

16TH, A. M.—Temp., 103.2°; pulse, 76–80; respiration, 24; several passages during the night; vomited frequently a limpid matter; no head ague, only slight pains in the lumbar region; tenderness of the epigastrium unchanged; one particularly sore spot in the lower border of the liver; dullness, corresponding with the seat of the gall bladder or pylorus; urine passed freely, of a light yellow color; some reaction; copious deposit of reddish white, scaly sediment; contains albumen. P. M.—Temp., 103.3°; pulse, 80; increased pain in the back and stomach.

17TH, A. M.—Patient very restless during the night; several passages of gray color; frequent vomiting, the discharged fluid mixed with brown flakes and red particles of coagulated blood; eyes more injected; increased tenderness of stomach; great prostration; face pale and somewhat yellow; temp., 103°; pulse, 80. P. M.—Temperature and pulse the same; frequent vomiting of black matter; hemorrhage of the nose and constant hiccup, which resists all efforts at relief. Dies the next day before noon; conscious a few hours before his death, the sixth day of his sickness.

W. B——, aged 21 years; admitted September 7th; came

from Memphis three weeks ago, on the Iron Mountain Railway; has not been well since August 31st; dates his present illness from the 1st, when it began with pains in the forehead, stomach and back; at present, great tenderness in the epigastric region; dullness and enlargement of liver; eyes injected and slightly yellow; tongue, thickly coated; slight pains in the forehead; great prostration and drowsiness; no albumen in urine; vomited three times to-day, the last time mixed with a few particles of blood; bowels, constipated; temp., 101.9°; pulse 80. Took one dose of calomel, and quinine afterwards. P. M.—Temp., 100°; pulse, 92.

8TH, A. M.—Temp, 104°; pulse, 100; frequent vomiting, but without blood. P. M.—Temp., 105°; pulse, 116; urine contains albumen and coloring matter of bile. One dram of quinine was given by injection, and cold sheets applied for an hour.

9TH, A. M.—Temp., 102.5°; pulse, 92. The next morning the temperature is reduced to 99°; pulse, 92; temperature rising again, and towards night reaching 105°; pulse, 100; treatment same as the night before—cold sheets and injection of one dram of quinine.

10TH, A. M.—Temp., 99°; pulse, 92; quinine continued; less albumen in urine.

11TH, A. M.—Temp., 100°; pulse, 84. The next day urine is free from albumen, and convalescence begins.

Besides these cases related above, the writer has seen a number of others which did not differ in any material point. In order to obtain a correct idea about a disease, it is of less importance to take a flying survey over a large number of patients than to find out by careful examination of the single cases the constant and invariable symptoms which, taken separately, may be found in other diseases also, but taken in combination will form a well-defined and characteristic type. Yellow fever makes no exception to this rule, and it was the conformity of some symptoms which probably led to the theory that yellow fever and malaria contagium were identical—which is still maintained by a few physicians in the face of contradictory facts. There may exist a relationship between all the microscopical organisms (bacteria, etc.), which have been discovered in the blood and discharges in most of the infectious diseases, and are supposed to be their generators, but unless we know more of their chemical and physical qualities and the part they play in

the pathological drama, we are referred to the microscopical phenomena for theories on causes and effects. And here from the well known fact that one contagious disease never changes to another, no other inference can logically be drawn but that a specific effect must have a specific cause. Malaria has never been known to assume the character of yellow fever even in such districts where it is endemic in its most pernicious and intense shape. This ought to be a sufficient proof of non-identity, for identity could only be concluded from the transformation of one type into the other, such as actually takes place in malarial diseases.

SYMPTOMS.—We will now examine each symptom in regard to its diagnostic value. The supraorbital pain presents nothing peculiar, while the pain in the back is frequently found in malaria also, but seldom so distinctly confined to the locality of the kidneys, which is not absent in a single case. Vomiting and tenderness of the stomach offer nothing characteristic, and even the discharge of red or decomposed blood, known as black vomit, may occur in cases of ulcers, cancers or in mechanical or chemical injuries of the stomach. But as it will always be easy to ascertain by exclusion the true cause of these symptoms, they are of great importance to the diagnosis.

The course of the fever is very singular. It is distinguished by a remission within the first three to five days. There is a striking misproportion between the temperature and the pulse. Altogether the temperature is not very high, seldom exceeding 104° F., (40C.), and reaching 105° F. (40.55C.) in only two of the cases. The remission is obvious in cases II and IV. These two cases were observed from the first beginning, while the others had been sick for several days before they were admitted. In both of these the temperature fell from 104° to 102° F. (38.58C.) within the first four days, in the first one rising again and reaching 105° F.; this occurred about twelve hours before death; in the latter case the temperature remained at a low figure to the end.

Not less characteristic is the pulse, its figures being quite inadequate to the height of the temperature. A pulse of 120 was counted once only in Case I, while the temperature was low; in this case there were grave cerebral symptoms. At 105° the highest numbers of the pulse were 116, and two times at 100°; at 104° the pulse raised from 80 to 100; at 102° and 103° it was as

low as 72; at 99° to 101° it was as low as 60, and in another (a fatal case not recorded here) it was even below 60. From the fact that the same misproportion between the pulse and the temperature existed in every case that came under my observation, without a single exception, I consider it as one of the most valuable diagnostic symptoms. That so little attention has been paid to this circumstance heretofore, even in the latest medical works, the writer is inclined to attribute to neglect in the use of the thermometer, which, as a diagnostic expedient, is still far from being universally adopted.

Hyperæmia of the conjunctivæ and a yellow color of the skin are not in themselves pathognomonic, for the former will be found in congestion of the brain and the latter in jaundice in a still darker color, but in connection with the other symptoms they will add to the confirmation of the diagnosis.

Albumen was found in the urine in all severe cases, as was bile pigment in most of them. The color of the urine seems to be of importance as a diagnostic character, because, as far as I could see, it was never of that dark brown tinge so commonly found in malaria; even the small quantity obtained by means of a catheter in Case III was only of a light orange color. Examination of the spleen will be of no avail for diagnosis, as in our country, the enlargement of this organ, as a consequence from malaria, exists in a large percentage of the population, while, on the other hand, it may be absent in the most pernicious forms of the disease.

There is one symptom deserving of notice which, although not always present, is peculiar to yellow fever exclusively; it is an offensive, carcass-like odor exhaled from the patient. This was distinctly perceptible in several cases.

Whenever all or the most conspicuous symptoms are present, no difficulty in making a precise diagnosis ought to exist. It seems strange that in some places there could be a difference of opinion among physicians as to the nature of the disease, after several patients had succumbed, and doubtlessly shown some pathognomnoic features. Quite different, however, are the light cases, which are analogous to abortive typhoid, or to cholera diarrhœa, which can only be recognized as such by the presence of an epidemic. The rapid abatement of all symptoms after a short duration, and the non-appearance of malarial attacks afterwards, without the use of quinine, may be useful to distinguish it

from malarial fever. The duration of the disease is naturally variable, depending upon the intensity of infection, and upon the individual power of resistance, which may be increased or diminished by outer agencies, as climatic influence, prophylactic treatment, etc. In my cases, a little over five days was the average time elapsing from the first chill until the fatal end; the extreme of duration being one death on the second day and one death on the twelfth.

As the immediate cause of death, we can distinguish a general and a local effect of the yellow fever poison. To the first belong all the conspicuous symptoms—the fever, the yellow coloring of the integument, the hyperæmia and hemorrhages of the mucous membranes—which indicate a morbid alteration of the blood and insufficient nutrition of the vital organs. Death may occur very early in the outbreak of the fever, or the patient may enter the second stage of remission, after which the temperature sometimes rises again, as in Case II, or it may remain low, as in Case IV. The most protracted case was that of a powerful negro who was admitted on August 31st and died on September 11th. During the last four or five days of his illness he was constantly vomiting large quantities of black matter; his extremities were cold, his pulse-beat from 54 to 60, yet remaining conscious to the last.

In cases of the second order, the general symptoms are less remarkable, or they may be absent, except some pain and a slight fever at the beginning. These patients usually die from retention of urine under the form of uræmic intoxication, as the history of P. M——, (Case IV) shows. The fatal termination in the first case I can only attribute to a local effect of the contagium upon the brain, as neither high fever, black vomit nor retention of the urine were present. It is hardly necessary to remark that these two types are not always distinctly separated, but various intermediate forms may be found which alter the pathological picture considerably.

Concerning the treatment, the same principles adopted for all acute infectious diseases will apply to yellow fever also. We do not know any remedy to destroy the poison within the system, and, therefore, all our therapeutic efforts must be so aimed as to place the patients under favorable conditions to overcome the attack, and to counteract its deleterious effect as much as possible. Unfortunately, in yellow fever, success will not re-

ward our exertions in an equal measure with that of typhoid fever; for instance, where the danger principally lies in the secondary consequenees of a continued high fever, which can be removed to some extent by reducing the temperature through the application of cold water, and the use of quinine. Statistical tables, running up to many hundreds, show the satisfactory result of this treatment in indisputable figures by a decrease of the mortality from 30 to 26 per cent. down to from 8 to 4 per cent. In yellow fever, however, it is less the influence of a long, lasting fever heat that must be feared than the intense decomposing effect of the poison upon the blood, and the subsequent acute degeneration of the vital organs, particularly of the stomach, heart, liver and kidneys, which, on post mortem examinations, are continually found in a morbid condition.

In the Quarantine Hospital, the patients were given a dose of calomel and castor oil if their bowels were constipated at admittance, as was usually the case; afterwards digitalis and iodide of potassium were prescribed. This latter remedy was recommended by a prominent physician, as a diuretic, in order to prevent retention of urine, but I never could see the least beneficial effect from its use. When the fever rose up to 104° or above, wrappings of cold sheets were made, and quinine given per os or per anum, with a view to the reduction of the temperature, which was promptly effected. To expect more from this treatment or to recommend the hydropathic method as a specificum against the contagium, as has been done in the South during the present epidemic, only shows great ignorance of its advocates.

Crushed ice and champagne were almost the only refreshments that the irritable state of the stomach would allow; enema of extract of beef and whisky were given, but with no marked success.

None of the patients in whom the pathognomonic symptoms: black vomit, yellow color or retention of urine were well marked, recovered; and it seems that the pathological changes upon which they depend are incompatible with the preservation of life. As the statistical figures of mortality in every epidemic show, our therapeutical means are insufficient against a certain degree of infection, but there may be a point in some of the cases at which proper treatment will turn the scale in favor of recovery in the same way as the antipyretic and stimulating

method undoubtedly does in typhoid fever. This is proved by the comparative results expressed in figures. The same test must be applied to different plans of treatment in yellow fever. There may be a few sporadic cases of recovery in which some favorite drug of the attending physician, as for instance, aconite, digitalis, gelseminum, iodide of potass., or nox vomica have been employed with a view to perform some certain task in the human system to control the nervous system, the brain, the kidneys, etc., but this cannot be considered as reliable proof of the superior effect of either remedy. We must remember that less than half a century ago, pneumonia was treated with repeated venesections; water and food were withheld in typhoid fever, and when a patient recovered in spite of this treatment, it was ascribed to its beneficial effect. By observing the natural unaltered course of these two diseases, a measure was obtained for the relative merits of therapeutical interferences, and a basis was found upon which a rational plan of treatment could be established. Until we possess similar reliable facts in regard to yellow fever, the therapie must be rather intended to prevent injury than to effect a cure.

At three post mortem examinations, the liver was in a state of fatty dengeneration; the kidneys semmed to be in similar condition, the corticle portion yellow-brown and friable, the pyramids dark brown, with distinct longitudinal white streaks, and numerous ecchymoses in the capsule; heart soft, pale, somewhat yellow and friable; mucous membrane of the stomach in a state of acute inflammation with numerous ecchymoses; its contents consisting of a more or less black, tar-like fluid and a slate-colored mucus; blood, fluid, with few or no coagula; spleen variable, in two cases enlarged with an ink black pulp imbedded in unusually strong fibrous meshes; in one case, (a girl of fourteen) of chocolate color and very friable.

ARTICLE IV.

REMOVAL OF A TUMOR INVOLVING THE ENTIRE PARTOTID GLAND.

By JNO. T. HODGEN, M. D., of St. Louis.

Peter H. Berg, of Salina, Kansas, æt 61; first observed a tumor in front of the right ear twenty years ago. The tumor remained about the size of the end of his thumb until the winter of 1877–78, when it increased in size. In June, 1878, he observed that the right eye could not be closed. In September following, he noticed that the mouth began to be drawn to the opposite side.

About the 1st of November, 1878, he presented himself with a marked though not complete paralysis of all the muscles supplied by the anterior branches of the portia dura, and a tumor the size of a small henegg.

Nov. 9th.—Assisted by Drs. McDowell, Mudd, Boutwell, and Mr. Dewey, and in the presence of a number of medical students I operated. The patient was put under the influence of ether by Dr. Boutwell. The face was turned well to the left side, and the chin elevated. An incision beginning an inch and a half below the tumor, at the inner border of the sterno-cleido mastoid muscle was extended along that border of the muscle until the mastoid process was reached; it was then directed forward below the lobe of the ear, and terminated below the zygoma, near the point of junction of the temporal and malar bones. The lower end of this incision was deepened along the anterior border of the sterno-cleido mastoid muscle until the sheath of the carotid artery and jugular vein was reached. Dr. McDowell now introduced his finger into this cut so as to control the carotid artery if required. A careful dissection was now made removing the skin from the surface of the tumor, and turning the flap forward the anterior border was reached, the duct of Steno and the transverse facial artery were cut. Keeping close to the tumor the front portion was detached as deep as the deeper part of the ramus of the lower jaw. The posterior part of the tumor was in the same way separated from the anterior part of the sterno-cleido mastoid muscle; also the upper part down to the auditory process of the temporal bone. The dissection of the lower

part was deferred to the last, so that if bleeding should require it, the remaining portion of the tumor could be detached rapidly, thus making room for the ligation of the vessels. To this point only two or three little vessels required ligatures. Drawing the tumor from below and keeping close to it—tearing mostly—only using the knife to cut the more resisting tissues, the deeper portion, including the external carotid artery and principal trunk of the portia dura was reached.

The tumor was now so far enucleated as to leave only the apex intact passing deep and near the styloid process of the temporal bone. In removing this, the external carotid artery was cut. Dr. McDowell stopped the blood through the common carotid and there was little hemorrhage. The tumor was quickly torn out, and the carotid was seized with the forceps and tied without difficulty. It was now found that the temporal and internal maxillary arteries had been severed and gave a little blood; both were tied. A careful examination of the wound was made by Drs. McDowell, Mudd, Boutwell and myself, and it was concluded that all the gland had been involved in the disease, and all removed except a small part at the upper portion near the auditory process. This little portion, though appearing healthy, was removed. There was but little oozing, and this soon ceased. The wound was washed with a twenty grain solution of chloride of zinc. The flap was laid back, and a compress of cotton wool applied over a cerate cloth, and all held in position by a bandage. Very soon after the operation, the right side of the face, the right conjunctiva and the side of the neck were intensely red; saliva flowed freely, so much so as to constantly dribble from the mouth. Three hours after the operation, the whole right side of the head, face and neck, were œdematous to a marked degree. This œdema had mostly disappeared at the end of the twenty-four hours, together with the redness. The condition of the pupil was not observed.

Some days later the patient had a slight erysipelatous inflamtion beginning at the wound and extending to the head and face. Pus formed under the flap, requiring evacuation by the knife. In all other respects, the patient progressed well. The last ligature was removed November 27th, 1878, and the patient left for his home November 29th. All the muscles on the right side of the face were paralyzed, including the anterior belly of the occipito frontalis and the corrugator supercilii.

Reports on the Recent Progress of Medicine.

ARTICLE V.

SURGERY.

BY H. H. MUDD, M. D.

Recently Mr. Jonathan Hutchinson and Mr. Thomas Bryant, of England, have made valuable contributions to the surgical treatment of intestinal obstructions. The memoranda for diagnosis and treatment given by Mr. Hutchinson will be found in the Periscope of this journal under Surgery for December, and should be carefully considered, as they are the result of large experience, and of conscientious and careful observation.

In the paper by Thomas Bryant is given a table of cases of intestinal obstructions obtained from Guy Hospital reports, which I suppose exhibits fairly the relative frequency of the different varieties of obstructions excluding those of hernia: Acute abstructions, 33; chronic obstructions, 76; intussusceptions, 15. Total, 124. This makes a very important clinical classification into acute and chronic cases. The intussusceptions may occur in either class, and the chronic obstructioms will sometimes assume acute conditions, but this does not invalidate the clinical importance of the two divisions. Considering first the larger class, viz., chronic obstructions, we find that of these three were the result of mechanical pressure of tumors, and three of fæcal impaction. These may be dismissed from further consideration for they demand only the mechanical removal of the impaction by rectal manipulation—oily enemata, etc., or right or left lumbar colotomy. The indications usually being clear while the cases are relatively infrequent. We may, then, divide the remaining seventy cases into two classes, viz.: 47 from stricture (2 small intestines, 45 large intestines), 23 from matting together of intestinal coils, from peritoneal and cancerous disease.

If, then, we see a patient suffering from abdominal distension, nausea, borborygmus and other symptoms of marked intestinal

obstructions, and find that he has previously suffered from difficulty in obtaining movements from the bowels, or in the act of defecation accompanied with occasional discharges of mucus or blood or change in form and character of the stools, we may at once assume that the acute symptoms are engrafted on a chronic condition and refer it to either a stricture or obstruction from peritoneal adhesions. Designating by "contraction" the obstructions which occur almost uniformly in the small intestines as a result of inflammatory, or cancerous or peritoneal disease, and by "stricture," the narrowing which is the result of disease of the bowel.

Now the diagnosis between these two forms of obstructions is according to Mr. Bryant a comparatively easy matter. If digital examination of the rectum, manual explorations of sigmoid flexure by introduction of the hand into the rectum, or the examination of the region of the ascending or descending colon, fail to locate with precision the more frequent form of obstruction, viz., stricture, then we shall find that the facts gleaned from "the light of pathological knowledge speak with no uncertain sound," for in the case of contraction, the symptoms are referable to a difficulty in the passage downward of the intestinal contents as evidenced by occasional attacks of griping colicky, abdominal pain and irregular, incomplete and uncertain incestinal evacuations which, when they do occur, are painless and healthy. In this condition the patient may feel perfectly well between the attacks.

In stricture there is a very gradual progress toward a complete obstruction. The distension slowly increasing with an imperfect and partial disappearance after copious evacuation, very different from the perfect ease and comfort which follows relief from an attack of colic dependent on congenital diverticulum or contraction caused by band of adhesion. The pain is due to distension, which is apt to be lumbar and epigastric, and is accompanied by painful defecation. Now add to these indications the fact that stricture is to be looked for in advanced life, each year added to the decline increasing the probability of its occurrence, and we have a comparatively clear field for a diagnosis and for treatment. When the obstruction from stricture has reached a point where it threatens life, we should not increase the danger by useless aperients or enemata, nor conceal its dangers by opium, but perform at once right or left lumbar colotomy. When con-

traction is the source of trouble, and laxatives fail to relieve, enterotomy in right or left iliac fossa should be performed, if from uncertainity of site and character of the obstructions, laparotomy is set aside as injudicious.

Turning now to our table we find that of the cases of acute obstruction, numbering 33, 1 is from internal hernia, 7 from twists or volvulus, and 25 from bands, formed by lymph diverticula, appendix cæci adhesions to neck of hernial sac or to the attachment of tumors.) Acute strangulation of the bowel, whether from internal obstruction or from hernial protrusion, is definite and sudden in its origin, accompanied by severe central pain, sickness and collapse, constipation, inability to pass wind, visible coils of distended intestines, and possibly scanty or suppressed urine. We can readily diagnose the presence of strangulated bowel, but can not so easily determine the source of the obstruction. Mr. Hutchinson says, in reference to treatment, abstain from food and medicine, using large enemata in the inverted position of the body; resort at once to anæsthetics, and make a thorough examination of abdomen, and test thoroughly and repeatedly in uncertain cases the efficiency of abdominal taxis, avoiding exploratory operations where the cause of obstruction is not diagnosed, reserving laparotomy for cases where diagnosis of invagination is clear. On the other hand, Mr. Bryant states that the inevitable tendency of unrelieved strangulations is toward death, and that relief of internal strangulations from natural influences is not more likely than it is in strangulated hernia, where the only efficient and justifiable means of relief is herniotomy, and further states that no prudent surgeon should leave a case of internal strangulation to run its course without laparotomy. The recoveries after laparotomy have been few, but I suspect it is because the operation has been practiced only as a *dernier ressort* after manipulation has injured the part, and inflammation has been established. All surgeons know how disastrous is much manipulation of a hernial protrusion, and how fatal the operation where it has been postponed until the last minute. The fatality attending such cases is very uniform, and laparotomy will not be less so when resorted to at the last minute. I hope and believe the operation will give better results where it is performed before irreparable injury has been inflicted on the tissues.

Intussusceptions may be either acute or chronic. They are of

three varieties rectal, ilio-colic and iliac, and are far more frequent in children than in adults. Where the invaginated portion is simply incarcerated it may give rise to slight disturbance, but where it is strangulated its symptoms are marked. The pain is local but not fixed in its position, as it is in band or contraction. It is frequently relieved by pressure, and is associated with tenesmus and bloody mucoid stools. There is frequent absence of abdominal distension. These cases not inrequently correct themselves, and in acute cases we may ordinarily wait a few hours, using meanwhile inflation, inversion of body, abdominal manipulation, opium and anæsthetics, while in the chronic, pursuing the same course, we may generally wait a week or more, and then, the diagnosis being clear, perform laparotomy, for the tendency of such cases where not soon relieved by natural or operative measures is toward death.

Realizing how difficult it is to make the diagnosis in cases of intestinal obstruction, we append a table offered by Mr. Bryant: (See page 35.)

J. B. Roberts, M. D., of Philadelphia, has distributed a reprint from the *Edinburgh Medical Journal*, on "Refractures for the Relief of Deformity following Badly Treated Fractures of the Extremities," in which he endeavors to indicate the province and methods for the operation. Impairment of function, is, he thinks, the prime indications for refracture, and when this exists, one would infer from his article that no other obstacle would deter him from the undertaking. He admits that those cases in which angular displacement is the deformity, are the most favorable for remedial means, but claims that overlapping, where it impairs function, is readily relieved, and where from proximity to a joint its movements are limited by thickening at the site of fracture, or if in fracture of the bones of forearm rotation is imperfect, he refractures. Indeed the only limit he admits is the ability of the surgeon to refracture, and this he thinks hardly has any limit in time, for he says, the period required to give the bond of union the solidity of the original bone, if indeed that ever occurs, must be looked upon as indefinitely long. Violence to accomplish refracture should be applied at site of the fracture, and if the overlapping is lateral it should be antero-posterior in direction or if the overlapping is antero-posterior the force should be lateral. He claims that there is but little danger in fractur-

A HELP TO DIAGNOSIS IN CASES OF ABDOMINAL OBSTRUCTION.

—	ACUTE— Obstruction or Strangulation.	CHRONIC OBSTRUCTION— From Disease of Large Intestine.	CHRONIC OBSTRUCTION— From Disease of Small Intestine.	ACUTE OR CHRONIC— Intussusception.
Previous condition of subject.	In good health.	Ailing for some time with abdominal symptoms.	Ailing, with previous attacks of incomplete obstruction.	In good health.
Mode of Attack.....	Very sudden and acute.	Symptoms gradually increasing in severity, or acute grafted upon old.	Paroxysms of colicky pain, upon old symptoms.	Sudden onset, and increasing when acute, subsiding when chronic.
Early symptoms:				
Pain.....	*Abdominal pain*—fixed, central, and paroxysmal.	*Pain* diffused and increasing with distension,	*Pain*—paroxysmal, with intervals of ease and hypogastric	*Pain* fixed, and often relieved by pressure.
Vomiting.....	*Vomiting* rapidly becoming fæcal.	Intermittent and fæcal towards the last.	Occasional during attack of pain.	Rapidly becoming fæcal in acute cases, absent or intermittent in chronic.
Collapse.....	*Collapse* very marked.	Absent till the end.	Absent till late.	Very marked in acute cases, not so in chronic.
Constipation.....	Absolute constipation and inability to pass flatus.	Gradually increasing in severity.	Attacks of constipation, alternating with natural relief.	Occasionally present, but, as a rule, "dysenteric" symptoms, straining, tenesmus, muco-sanguineous stools, or hæmorrhage.
Abdominal Distension.,.....	Rapid and severe, central and hypogastric.	Gradually increasing, lumbar and epigastric.	Never great, increased during attack.	Rarely severe.
Manipular Indications.....	Tympanitic; distended coils at times to be felt.	A fixed swelling at times to be felt in either iliac fossa.	A doughy condition of bowel, becoming knotty during attack.	Distinct tumor often to be felt, its shape varying during attack.
Visible Indications.....	Abdomen tense in umbilical and hypogastric regions, with visibly distended coils.	Abdomen broadly distended; coils of intestine visible.	Coils of intestine very visible.	Nothing marked to be seen.
Peristalsis.....	Rarely visible.	Marked.	Very marked.	Not visible.
Urine.....	Scanty or suppressed.	Natural in quantity.	Natural.	Natural.
Rectal Examination	Lower bowel probably quite empty.	Stricture of the bowel may be felt in rectum or in sigmoid flexure by manual examination.	Nothing abnormal.	Rectum may contain mucus or invaginated bowel.

ing, except at original break, and thinks there is none from pyæmia, laceration of the vessels or non-union. He cites eight or nine cases occurring in the practice of various surgeons as evidence of the propriety of his position, and in formulating his conclusion, says "Refracture is the method of correcting deformity after maltreated fractures, because it gives relief without suppuration, which is liable to follow drilling, and almost certain to result from the operation of excision." Now turning to his table of cases reported, we find that six out of nine were subjected to refracture within six weeks of the time of the orignal injury. The other three cases were respectively of ten, fifteen and twenty-nine weeks duration, and it is very possible that any one of the nine cases may have been soft enough to have been molded by gradual pressure and extension into proper position, and certainly it is entirely within the limits of probability to assume that this was the fact in those cases that were refractured within six weeks.

CASE IV.—A boy, aged 15 years; had fracture of the middle third of the femur, with shortening of one and a-fourth inches, for which the operation of refracture was performed at the end of three and a-half weeks. Dressings were then applied to prevent overlapping. Twelve days after the operation an immovable plaster of Paris dressing was applied to the leg from the waist to the ankle, without etherizing the patient." "In about three weeks the plaster dressing was removed, revealing a shortening of fully one inch, whence it was decided to apply extension by means of weights and adhesive strips." "After using extension for ten or twelve days, six and one-half weeks having elapsed since the fracture, the union seemed to be firm and there was but half an inch of shortening. "Observe now that the history of the case claims firm union in the femur at the end of three and a-half weeks, and yet, nothwithstanding the well-known fact that refractures unite more rapidly than original ones, he at the end of four and a-half weeks after the refracture, finds the deformity almost as great as it was at the time of refracture, but gains in ten days by simple extension one-half an inch in length, this being a better result than he had from refracture and good evidence that it did not need to be refractured in the first place, but needed only the care which all surgeons should give to their fractures at the time the callus is hardening,

viz: care to correct deformity and insure union of fragments in good position. The treatment given these nine cases may have been just what they needed, but it must be remembered that, although none of them were treated by the author, he offers them as evidence of the propriety of the position he assumes as an advocate for refracture.

The time here allowed to lapse does not invalidate the position of Hamilton, when he, as our author says, "thinks there is little hope of gaining anything in length, in cases of shortening caused by over-riding, because the muscles have become permanently contracted by adjusting themselves to the new condition of things."

Nor does the seeming absence of danger in these cases invalidate, in any particular, the objections entertained against the operation, for no surgeon would anticipate any danger of fracture except at site of original break, where it had so recently occurred; but it would be possible and probable after a lapse of two or three years. In the same condition, laceration of vessels would be possible, and inability to restore full length of limb improbable, when sufficient time had elapsed to establish the nutritive changes in the shortened muscles.

In conclusion, I think we may safely say that the Doctor's deductions are not so well established as to alter the status of the operation. Nor has he offered any evidence that the objections usually entertained by surgeons are not well grounded and proper. The operation is an important one, is proper in certain cases, but its danger and difficulties are to be found in older fractures than those quoted by the author. I think the great majority of fractures may be molded by pressure and extension when treated within three or six weeks of original break, and that refracture, when necessary within these limits, is readily accomplished and comparatively free from danger. Refracture, however, will not generally be necessary until a later period.

The pure rubber bandage of Dr. Martin seems to be gaining favor in the treatment of varicose veins and for ulcers not specific in their character. Mr. George W. Callender, of St. Bartholomew's Hospital, reiterates the importance of the specific directions given by Dr. Martin concerning the character of the bandage and its application. The bandage is to be applied during the day, and removed after retiring at night, the ulcer pro-

tected by some non-irritating oil or unguent at night. The bandage should be cleaned and dried, and applied before rising, but after the leg has been perfectly cleansed of all oil or grease. If the skin becomes irritated or the moisture of the skin is excessive, apply under the rubber a light bandage as a protective and absorbent. So far, I have not seen any reports confirmatory of Dr. Martin's good results from its use in diseases of the joints, but I believe such reports will ultimately support the Doctor's recommendations. Where it is applicable it certainly offers a better prospect of controlling inflammations and growths than does the more dangerous and less reasonable procedure of ligation of arteries.

ARTICLE VI.

DISEASES OF THE NERVOUS SYSTEM.

BY C. H. HUGHES, M. D.

1. Absence of the Corpus Callosum in the Human Brain—Dr. Eichler—*Archiv. für Psychiatrie.* Dr. R. Adriano—*Brain.*
2. The Pulsations of the Brain—Dr. Carlo Giacomini—Academia di Medicina di Torino dal Socio.
3. Pathological Lesions *vs.* Motor Centers—Dr. Maragliano.
4. Tumor of the Brain tending to confirm the views of Ferrier.—Prof. Watson, Manchester, England.
5. Traumatic Lesion of the left Cerebral Hemisphere confirmatory of Broca's and Ferrier's views.
6. Congenital absence of left hand with corresponding brain atrophy—By Dr. W. R. Gowers, University College, London.
7. A study of 415 cases of Tetanus—Yandell in *Brain* for October.

1. The defective mental development of the vertebrate animals, from the bird downwards, has been attributed by Sanders and others to the absence of the corpus callosum; and the most varied functions have at various times, and without the least foundation, been ascribed to this part. "It is astounding," as Hitzig justly observes in his contribution to Ziemssen, "Atrophy of the Brain," that Lapeyronie, on the basis of very bad observations, was able to gain such partisans as Louis, Chaport, Lane-

crotte, and others, for his hypothesis that the corpus callosum was the seat of the soul; and especially are we surprised in the light of what follows.

We are indebted to Dr. J. C. Galton for bringing before the English-speaking portion of the profession in the pages of *Brain* for October, another instance discovered by Dr. Eichler, of the Pathological Institute at Keil, of this interesting anomaly having existed in man, as in the cases of Sanders and Malinverni, without psychical derangement.

It would seem that where the corpus callosum alone is lacking, intelligence is not wanting. It is only where other portions of the brain are conjointly deficient that epilepsy, mania, idiocy, co-exist, as in a case reported by Dr. Robert Adriano, Superintendent of the Asylum at Perugia in 1876, for the translation of which we are indebted to Dr. Wm. W. Ireland in book notices of *Brain* for October. In Malinverni's remarkable case the septum lucidum was wanting, though the patient was mentally sound and died of an intercurrent disease.

"Dr. Adriano's case was a shoemaker 38 years of age, epileptic for twenty years and insane for seven years. His grandfather had been demented, and he himself was given to drunken habits. He had hallucination of hearing and touch, and finally restless dementia, and died of the consequences of epilepsia. Before being seized with this disorder the man could neither be called idiotic nor imbecile, though his intelligence was not good.

Not only the corpus callosum, but the septum lucidum and the middle and anterior part of the fornix, were found wanting. There was also a general softening of the brain, with œdema and paleness of the cortical substance, effusion of blood under the arachnoid, and inflammation of the middle part of the superior longitudinal sinus." The number of authenticated cases of congenital absence of the corpus callosum is very small. Dr. Adriano records his case as the twenty-second on record. References to the source of Sanders', Knox's, Turner's, as well as Eichler's cases, may be found on p. 419, Vol. I, No. 3, of *Brain*.

2. We are further indebted to Dr. W. W. Ireland and the pages of *Brain* for November, for the interesting observations of Dr. Giacomini made upon the brain of a woman whose left frontal bone at its posterior part to the extent of a five-franc piece was destroyed by syphilitic ostitis.

These observations, repeated during several months, were of inestimable value. Dr. Giacomini, assisted by Dr. Mosso, with the aid of Marey's cardiograph, placed the bottom of the instrument over the part of the brain laid bare, and elicited, by the curves and zigzags of the smoked paper, the rising and falling of the brain. The wave of the blood driven into the brain and distending all its vessels and volume was shown in the ascending curve, and the empty cerebral vessels and diminished volume of the brain were shown by the descending curve of the cardiograph.

One out of every three or four of the cerebral pulsations rose higher than the others, caused by the respiration.

At every inspiration the blood would flow more freely from the vessels of the brain, and the curve of the smoked paper would then descend the lowest. During respiration the blood returns with difficulty from the brain, hence an elevation in the curve of the cerebral pulsations.

A rotary cylinder applied to the chest indicated the movements of the thorax, and showed the exact correspondence of the respiration with the highest part of the cerebral curve, and of the inspiration with its descent.

The pulsations were greatly increased by compressing the jugular veins, and, *by sleep induced by chloral, were twice or three times the usual size.* There were also unexplainable irregular undulations in the curves.

On compressing the carotids the cerebral pulsations ceased, and the pulse trace became straight for a while; but in a little while the pulsation returned, owing to the blood supply finding its way into the vessels from the basilar artery through the circle of Willis. Compressing the jugulars rapidly increased the volume of the brain.

These experiments drive another nail into the coffin of the dead doctrine that the brain is *a plenum*, and indicate hydrate of chloral as the proper hypnotic where insomnia exists, conjoined with anæmia. It would have been more gratifying had the Doctor shown the condition of the cerebral vessels in bromide of potassium sleep, and the insomnia of quinia and alcoholic excitation, as well as their secondary somnolence.

Drs. Giacomini and Mosso presented to the Academy of Sciences of Paris, in January, 1877, a report of which appears in the *Bulletin de Therapeutique*, and in the *Chicago Journal of*

Mental and Nervous Disease for October, of that year, conclusions similar to those reported in this paper, together with a photograph of his case.

He is reported in the latter journal, p. 811, to have found, during profound sleep with snoring, that there was quite a pronounced increase in the height of the cerebral pulsations, the respiratory oscillations and undulations being much more marked. This is somewhat at variance with the statement of Hammond—Diseases of the Nervous System, p. 19; Sleep and Its Derangements, p. 317, 1869,—"that during sleep the amount of blood circulating in the cerebral vessels is much greater than during wakefulness."

The essential to the production of sleep, as we have long believed and practically regarded in cerebral therapeutics, is to secure quiescence of the cells of the psycho-motor centers.

In insomnia with cerebral anæmia and great exhaustion of the ideational and emotional centers, stimulating hypnotics, like chloral, opium or whisky, act well, while, in inability to sleep from over-excitation of these same centers with general or local cerebral hyperæmia, agents like the bromides act best alone or with some chloral.

Drs. Giacomini and Mosso's experiments show that during the occlusion of the femoral arteries the cerebral pulsations are acuter and higher, and that every movement of the body and all intellectual labor is reflected upon the brain, which undergoes a visible modification in its volume and in the form of its pulsations.

These discoveries add much to our knowledge of the movements of the brain, but not so much as Dr. Beaumont, many years ago, with his patient, Alexis St. Martin, contributed to our positive knowledge of the stomach and its digestive processes. For it must be borne in mind that the cranial cavity is naturally closed, and the cerebral blood supply is somewhat modified by cranial openings, subjecting the brain and its vessels to atmospheric pressure. They prove, however, that neither the *plenum* nor *a plenum* theory of sleep is wholly true.

3. (*a*) Dr. Maragliano in the *Rivista Sperimentale di Freniatria*, (anno iv., Fasciolo i.), as noticed and abstracted by Dr. W. W. Ireland, for the October number of *Brain*, from an observation of 97 cases from French, German, English and Italian

sources, considers that Hitzig and Ferrier's views are substantially the same.

Dr. Maragliano, contrary to the opinion of Charcot and Pitres, who, basing their deductions on 41 observations, concluded that derangement of the movement of the superior extremity corresponded with a lesion of the middle third of the ascending frontal gyrus, thinks that the motor centers of the arms cannot be thus limited, but that these centers must cover the two upper thirds of the entire motor zone, for he finds *paralysis and convulsions confined to the arms, corresponding with lesions, disseminated over this whole tract*, and gives the following conclusions:

1. Alterations in the cortex of the cerebrum may cause alterations in the motor functions of the body.

2. The motor functions are influenced exclusively from the frontal and parietal lobes.

3. Frontal are more frequent than parietal lesions of convolutions.

4. In the frontal lobe the faculty of influencing motor function is confined to the ascending frontal gyrus and to the posterior part of first, second and third frontal.

5. Of all the frontal convolutions, the ascending gyrus is the oftenist injured.

6. In the parietal lobe the faculty of influencing the motor functions resides especially in the ascending parietal (gyrus centralis posterior).

7. Lesions are found in the two ascending or median gyri equally.

8. In the motor derangements of the upper extremity, the lesion may be found in the two upper thirds of the motor zone.

9. Motor derangements of both limbs correspond to lesions in the two upper thirds of the two ascending or median gyri.

10. When pronounced disturbances of the muscles of the eye are associated with motor derangements of one or both limbs, he always found a lesion in the inferior third of the ascending frontal gyrus.

11. Motor derangements of the superior palpebral muscles seem to correspond with lesions of the inferior parietal gyri.

12. The phenomena of excitation, cramps, convulsions, and

other epileptiform attacks, correspond indistinctly to alterations in the ascending frontal and parietal convolutions, and to points immediately contiguous.

(*b*) In this connection the conclusions of Dr. Palmerini, drawn from the three cases of left cerebral softening affecting the ascending frontal or anterior marginal convolutions are quite *apropos*.

After discussing the present condition of opinion regarding the localization of function in the brain, Doctor Palmerini concludes as follows:

1. In the frontal ascending or marginal anterior convolution exist *psycho-motor centers* (Albertoni), which exert a manifest influence upon the voluntary movements of entire groups of muscles of the opposite side.

2. These centers correspond in man to the sites indicated by Hitzig, Ferrier and Albertoni.

3. Lesions of these points produce persistent, but incomplete paralysis, susceptible of marked exacerbation and diminution.

4. This particular form of progress of symptoms and the permanent, if incomplete, paralysis, particularly when preceded by exacerbation and diminution, are two clinical characters of the utmost importance.

5. The constancy of motor lesions consisting always in phenomena of paralysis and ataxy, shows that the nature of these centers is motor (*psycho-motor*) and not sensory. (From these clinical confirmations of Ferrier and Hitzig's researches it looks as though Dupuy, Braun, Burdon-Sanderson and others, who think that the motor phenomena following electrization of the cerebral cortex, is due solely to the transmission of electricity to the corpus striatum and medulla oblongata, and all others who deny the existence of motor localizations in the anterior and lateral convolutions of the brain, will have to gracefully surrender their views.)

4. Prof. Watson, of Owens College, Manchester, England, reports in *Brain*, for July, a case of tumor of the brain, involving the upper half of the ascending frontal and parietal convolutions, and the anterior half of the posterior parietal lobule, causing paralysis in the left leg and arm, and tending to confirm the conclusions of Ferrier.

The tumor measured three inches in diameter in all directions, extending to the floor of the right lateral ventricle; it had obliterated in its course a portion of the cerebral mass extending from the ascending limb of the sylvian fissure in front, to within an inch of the external parieto-occipital fissure, posteriorly.

5. Dr. W. Maccormac, F. R. C. S., and Surgeon to St. Thomas' Hospital, likewise presents in the same number of *Brain*, a case of traumatic lesion of the left hemisphere with right brachio-facial paralysis and aphasia, confirmatory of the conclusions of Broca, Sydney Jones, Simon, Proust, Terillon, Lucas, Championniére, Bastian, Ferrier and others, that lesion of the left hemisphere, in connection with failure of the power of speech and memory, is no mere accident.

6. Dr. W. R. Gowers, Asst. Prof. of Clinical Medicine, in University College, presented a case to the Royal Medical and Chirurgical Society, of London, which appears in Part III of *Brain*, of congenital absence of one hand and corresponding brain atrophy in the hand region of the opposite hemisphere, with the remark that the chief interest in the case arises from the fact that the diminution of the size of the ascending parietal convolution on the opposite side of the brain occupies precisely the area, stimulation of which, according to the experiments of Ferrier on monkeys, causes movement of the opposite hand.

7. Dr. David W. Yandell, in *Brain*, for October, finds from a study of 419 cases of tetanus, that 80 per cent. of them were males; 7 per cent. occurring in the first ten years of life, with 60 per cent. mortality; 20 per cent. occurring between 10 and 20 years, with a mortality of 38 per cent. The death rate could not be made out in the remaining decade, the cases being simply reported as adults; 15 cases occurred after 50 years, and one at 89 years.

Eighty-eight cases were from wound of the foot, and 90 from wound of hand; 28 of the upper extremities, exclusive of hand, and 67 of lower extremities, exclusive of foot. Wound of the head, 20; of the trunk, 4; cancer, 1; abrasion of the cornea, 1; abortion, 10.

Neither the situation nor character of the injury influenced the result. Death followed in 40 per cent. from hand wounds,

and in 44 per cent. from wounds of the foot, and in 90 per cent. of the puerperal cases.

The disease supervened in two weeks after the injury in 196 cases with 65.5 per cent. mortality. From the fourteenth to the twenty-first days, 81 cases, and 17 per cent. of mortality.

In cases occurring within seventy-two hours after injury, recoveries exceeded deaths 14 to 11; occurring between the fourth and ninth day, deaths exceeded recoveries, as 73 to 33, 69 per. cent.; occurring on the thirteenth day, deaths to recoveries, as 7 to 3, but when tetanic symptoms did not appear until the fourteenth day recoveries were notably in excess of deaths—28 per cent.

In one-fourth of the cases the date of invasion was not given.

Tetanus when fatal was nearly always within the first four days after the attack.

In regard to the treatment he concludes that the "results by the different remedies are so nearly *the same that no one agent can justly be said to possess a decided superiority over any other.*

Amputated Cases	60	per cent of	17	cases	recovered.
Aconite	8	"	00	"	"
Cases Bled	50	"	58	"	"
Calabar Bean	39	"	39	"	"
Cold Affusion	73	"	11	"	"
Division of Nerve	66	"	8	"	"
Indian Hemp	64	"	25	"	"
Ether	60	"	15	"	"
Ice Bags	77	"	9	"	"
Mercury	57	"	75	"	"
Opium	57	"	165	"	"
Purgatives	66	"	74	"	"
Quinine	73	"	15	"	"
Stimulants	8	"	33	"	"
Tobacco	50	"	41	"	"
Turpentine	70	"	16	"	"

Cloroform relieved 70 per cent of 35 cases.

Chloroform ranks in these tables as the most efficient agent yet known in acute tetanus, while even mercury and venesection, which belong to a past age, excel the calabar bean, of which so much was expected.

Only musk, woorara and warm baths fell below calabar bean in efficacy.

ARTICLE VII.

THE SPIRIT OF THE EUROPEAN MEDICAL PRESS.

By A. C. BERNAYS, A. M., M. D., Heidelberg; M. R. C. S., Eng. Member of the German Society of Surgeons, Berlin, Etc.

[In these papers, to appear monthly in the JOURNAL, we propose to give a short resumé of the most important and interesting novelties that appear in the European medical press. By special arrangement we will be able to publish the most recent discoveries and innovations in a very short time after they appear in Europe.]

Prof. Dr. von Nussbaum, of Munich, in a most interesting monograph, gives us the results of his experience as an ovariotomist. He says: "The operation of ovariotomy has some very peculiar features. No operation requires as much experience and courage; in no other operation is the most important feature of an operator, the absolute equanimity in case of the occurrence of something unforeseen, so much called for as in ovariotomy. It is impossible to know what may occur, whether there be adhesions or not, whether there be a pedicle or how long the same may be, etc. Therefore the terrible judgment: that no operator will have as good results in the first 20 cases as in his second or third score can be applied only to this operation The terrible sentence is actually true and it is a blessing that the general public does not know it, because no operator can begin with his 21st case, and consequently the stage of terror must be gone through with. This can positively not be said of other operations. I am firmly convinced that many a young surgeon performs his first amputation just as faultlessly and with as good results as his fortieth or fiftieth. This can not be held with regard to ovariotomy honestly speaking, unless the beginner may have assisted to twenty or thirty operations at previous times."

Nussbaum operates under antiseptic precautions. He always turns the patient on her side before puncturing the cyst, and opens all secondary cysts from within the primary cyst. After this he tries to lift out the tumor with his hand from the pelvis; does not like pulling on the cyst. Only slight adhesions are

torn by the fingers; the longer he has operated the less he makes use of this procedure, claiming that it gives rise to parenchymatous hemorrhage, which is very hard to control; very vascular adhesions are ligated doubly and cut between the ligatures. It sometimes comes to pass that by this means pieces of the cyst-walls up to the size of 1½ square inches are left attached to the small intestines, the uterus, etc. "I have never left a single operation incomplete on account of adhesions, and a very encouraging number of these bad cases have recovered so that my opinion in this respect remains unchanged." In case of uncontrollable hemorrhage from smaller vessels, where adhesions have been torn away, Nussbaum has found it an excellent practice to increase the pressure in the abdomen by the weight of two or three bricks laid upon the dressing of the abdomen.

"I had to dissect the ovary off from the uterus in one case to the extent of about fifteen square inches, but the uterus bled very freely from numerous vessels, so that I did not place confidence enough in my brickbats. Had it been a cyst-wall I should have left the same in connection with the uterus, but it was a firm sarcomatous mass. I covered the bleeding surface of the uterus with a flap of peritoneum, which I dissected off from a neighboring secondary cyst, about the size of a hand, which was in connection with the peritoneum of the pedicle, the vessels of the latter having been ligated after isolation. I used fine catgut for sewing the flap down. In this case, a piece of one ureter was intimately connected with the ovarian tumor, and was removed with the tumor. As I have related in my monograph about the case, it got well rapidly without any disagreeable symptom excepting that a fistula remained about an inch below the umbilicus, out of which one-half of the urine was passed. The patient was very much distressed, and the old appliances that were tried caused great inconvenience and answered their purpose but very incompletely, so that I began thinking about some radical operative means to effect a cure. I did not dare to follow the example of the late Prof. Simon, of Heidelberg, viz: to extirpate the right kidney, because the patient was too weak and emaciated to stand so severe an undertaking. I could not attempt to obliterate the fistula on account of the great amount of the secretion, and in both of the above operations the left kidney would have had to fulfill double the functions it had been used to. Therefore, I followed a third plan: I established an

artificial ureter, or rather a fistulous duct, which led from the reservoir of urine, that had formed below the umbilicus to the bladder. I could not find the vesical orifice of the ureter that had been cut off, although making use of Simon's specula. Therefore I passed a trocar through the urethra and through the cavity of the bladder to a place at the fundus, which I supposed would about correspond to the location of the normal orifice; I then perforated the bladder, and passed my instrument up into the reservoir below the navel. I then passed a drainage tube and after some trouble, I actually succeeded in establishing a passage for the urine into the bladder. It became a very easy matter now to close up the abdominal fistula, and it gives me exquisite pleasure to use my pen and relate that at present, after several years, the new ureter is in excellent function, and that the patient has no notion of the fact that she has but one ureter, and that an artificial fistulous passage is in existence in her abdomen. She lives like a sound person, without a complaint."

After the above most interesting excision, which, in the opinion of your reporter, is the most elegant achievement by a single surgical operation on record, our author relates another most interesting case which I will also present in a few words, using the language of the author where convenient: In March, 1878, Nussbaum undertook an operation for what he supposed to be a multilocular ovarian cystoid. He actually found a multilocular cystoid, but it had no connection with the uterus, and there was no pedicle. The cysts, varying from the size of a fist to that of a child's head, were situated along the lower part of the small intestines, and "I either had to leave the operation incomplete or proceed to cut these tumors away from the intestine. All those present were of the opinion that we were dealing with a degeneration of the mesentery for the cysts were arranged alongside of the intestine. I concluded to remove them and did so with a pair of Cooper's scissors." A piece of small intestine was thus left loose in the abdomen; its length was 15 inches, it had the appearance of a sausage, the mesenterical edge of which was bleeding so freely that it was necessary to apply 14 catgut ligatures. "I confess that we all felt very uneasy about the case; that we feared this piece of intestine 15 inches in length might mortify or lose its function, or perhaps might stop the peristaltic movements, etc., and my first question at each visit was in regard to the vomiting, but I always received a

negative answer. We were all greatly astonished at the desirable course the case took; flatus passed on the fourth day; the first passage was delayed up to the eleventh day by morphine, and the patient left the Institute after six weeks enjoying excellent health.

His remarks about the treatment of the pedicle give us no new methods; he seems to prefer ligating the pedicle in several small portions by means of strong catgut.

In regard to the toilet of the peritoneum he says that it is not necessary to be so very scrupulous when making use of the antiseptic method.

He has found that the most rapid recoveries ensue when drainage is not practiced and has abondoned it unless great uncleanliness of the cavity calls for it.

Nussbaum relates the following curious and instructive circumstance at the close of his paper: "Although I fasten each drainage tube to a long silk thread, it occurred to me in the case of a lady upon whom ovariotomy had been performed, that one tube slipped into the abdomen from the lower edge of the incision and was lost. The wound healed up and one month after her dismissal from the Institute, a ball was given (the 62nd day after the operation) in celebration of her recovery. All the invited gentlemen danced with the queen of the feast, and she became terribly exhausted At 4 A. M., during a gorgeous cotillon she was suddenly taken with severe pains, deep-seated stitches in the abdomen; she could waltz no longer, and in fifteen minutes could not even stand erect. She walked into a side room, and looking at her abdomen, saw a movable black spot in the center of the then painful cicatrix; grasping it with her nails she withdrew a drainage tube 2¾ inches in length, wiped off some pus, and feeling relieved of all pain, returned to the ball-room and enjoyed dancing to the end.

Translations from the German.

GLAUCOMA. Excerpts from a Lecture by L. WECKER. [Translated by WM. DICKINSON, M. D., of St. Louis, from *Klinische Monatsblätter für Augenheilkunde* for May, 1878.]

For a long period great unanimity of opinion has prevailed respecting the proximate efficient cause of Glaucoma,—increased intra-ocular pressure and its consequences,—but a considerable diversity exists in regard to the mechanism by which this pressure is effected.

Citing the opinions of authors, Wecker states, "according to the view of Donders, this pressure is the result of increased secretion;" his own, "such a condition in by far the greater number of cases is developed in consequence of impeded excretion." Dr. Knies regards an inflammation of the tissues investing the canal of Schlemm as an essential factor; Weber, that the cause of glaucoma consists only in a mechanical and gradual compression of the filtration passages of the humors of the eye. He also adds, "the filtration passages discovered by Leber can be compressed by the hyaloid tissues, and the excessive development of the epithelial layers covering them; and besides that, glaucoma will be obviated by the restoration of filtration through the agency of a cicatrix." During the discussion of the subject of glaucoma at the Congress at Heidelberg held in 1877, it was maintained that closure, i. e., obliteration of Fontana's space, does not in and of itself induce glaucoma, but on the other hand it more frequently occurs while Fontana's space remains free; and Pagenstecher states that in by far the greater number of cases of eyes lost from glaucomatous processes, the iris and ciliary body undergo material changes. It was also held that glaucoma is occasioned by a defect of filtration, and that the fundamental cause of increase of pressure must be sought in the eruption of impediments which have developed in the filtration passages. These impediments may be occasioned through the agency of the iris and the lens, which latter crowds against the iris-angle and causes obliteration of Fon-

tana's space; yet these cannot be regarded of the character of those which as antecedents necessarily result in the production of the principal forms of glaucoma, viz: acute, chronic-irritative and the simple chronic. It is the obstruction of the filtration passages in which is involved the question of glaucoma.

The filtration passages, according to Leber, are: 1st, the tissues surrounding the cornea; and 2d, those investing the optic nerve entrance (papilla). These are the only parts of the interior of the eye that are not covered by a transparent membrane (glashaut), which same is little adapted for filtration. The principal filtration avenue is certainly situated around the cornea, just where the anterior chamber by means of the trabecular tissue obtrudes itself, as it were, beneath the conjunctiva. In this region the union of the various lymph passages takes place, viz: of the cornea, sclerotica and the membranes of the interior of the eye with the great lymph space, which we call the anterior chamber of the eye. Impediments, which may be developed in this trabecular tissue, whether they arise from the chambers of the eye, from the sclera or in fine from the conjunctival side, will hinder the transudation of the humors of the eye into this principal filtration avenue (haupt filtrationbahn).

How is this infected circle (circulus vitiosus) developed, which when once affected by an anomalous increase of pressure surely threatens more and more to shut up the filtration passages? According to my opinion it is determined by an increase of pressure, accompanied by some change in the form of the globe, which through compression of the trabecular tissue at the iris-angle occasions impediment to filtration.

In that form of chronic glaucoma which is entirely free from symptoms of irritation, and in which increased pressure exists only in a slight degree, and the most essential appearance of disease consists in the recession of the optic papilla (staph-post), we must seek for the impediments, not in the great filtration avenues of Leber, but in the small ones situated around the optic nerve.

We especially insist that the development of glaucoma is *par excellence* favored by a deficiency in the elasticity of the sclerotica. This defect of elasticity on the one hand renders impossible any compensating adjustment for the small (it may be) and antecedent increase in the contents of the eye; and on the other facilitates the production of the infected circle already

referred to, that is, through the increase of pressure which on the part of the sclerotica is especially unyielding in its external layers, the apertures of filtration proceeding from the anterior-chamber will be so much the more compressed, as the intensity of pressure increases.

Glaucoma, which, as statistics show, constitutes one per cent of all diseases of the eye, usually supervenes when signs of senility begin to appear, that is, about the fiftieth year. At this period fatty degeneration and calcareous deposits take place in the sclera (Coccius), and also a considerable thickening of the tissues in the vicinity of the filtration passages. Under these conditions the eye may acquire such a degree of fullness that the addition of the least drop will develop this affection. This will take place, for example if, simultaneously with the existing atheromatous, varicose or aneurismatic changes, rupture of them should occur. A like condition may ensue, if, after the instillation of atropine, the expansion of the blood vessels is sufficient to induce an excessive fullness of the eye to such a degree as to interrupt the equilibrium between secretion and excretion, and through the establishment of the diseased circle to render this accident a permanent condition. In an eye affected with such proclivities a mere congestion of the vessels, even for a short period, may occasion such a disturbance of equipoise; and violent emotions of the mind are able to bring an impending glaucoma to its outbreak (ausbruch). An old lady (related by Fischer) who was very much affected by her loss at the gaming table, speedily lost vision in one eye from glaucoma. Having been positively forbidden the indulgence of this passion she for a time obeyed; but, subsequently, having one day yielded to the temptation she unfortunately was again a loser to a large amount, and during the night following she became *totally blind and so remained.* Fear also may be the occasion of glaucoma. During the siege of Paris, a prominent engineer, fifty-six years of age, having left the city in a balloon, happened to descend in the country of the enemy; and, being made a prisoner, was conducted to prison. He soon observed a rapid diminution of vision from glaucomatous processes, which assumed the chronic form; for which, however, an iridectomy was performed with good results.

Again, a lady of fifty-two years of age, of good social position, having been detected in the act of stealing an article of trifling

value from one of the stores of the capital, was arrested and taken to prison. She suffered an immediate attack of irritative glaucoma in both eyes, from which there resulted speedily a deep excavation of the papilla, accompanied by a considerable reduction of vision. Farther deleterious consequences were arrested by iridectomy in both eyes.

Though injuries, such as the introduction of a foreign body to eyes that are predisposed to an interruption of the normal equipoise between secretion and excretion, will not occasion an excessive secretion of the humors of the eye, yet they may occasion such a distension of the vessels as will suffice to induce a disturbance of the equilibrium. This traumatism with the temporary congestion that usually accompany it, will in the case of a young person, in the eye injured, meet with a compensating distension of its enveloping tunics, due to their greater elasticity. But this cannot occur in an organ affected with considerable senile changes, the filtration passages of which are narrowed to such a degree that, of necessity, the normal amount of nutritive material secreted cannot be discharged. Amid such conditions, a very slight increase of tension will suffice to close up entirely the infected circle of which we have made mention. Till recently it was entirely impossible to understand why glaucoma occurred with greater frequency in certain races (Jewish), and in certain families. It is now known to occur in persons whose sclera by nature is sparingly distensible, and the filtration passages consequently are capable of yielding but little; or whose sclera has been invaded in such manner that their closure cannot readily take place in consequence of the senile changes developed in them. On the other hand, if glaucoma is rarely met with in many nations (Arab races of the interior of Africa) it must not be forgotten that all the fibrous tissues in these people are very pliant and manifest but little tendency to fatty degeneration. Still, in these races, instances of consecutive glaucoma, following penetrating wounds of the cornea, are not infrequent, occasioned by a sudden and considerable shutting up of the filtration passages." The remainder, devoted to the neurosis in consequence of which this affection supervenes, will be considered hereafter.

PETTIS COUNTY MEDICAL SOCIETY.

At a regular meeting of the Pettis County Medical Society, held at Sedalia, Mo., August 26th, 1878, the following proceedings transpired:

Dr. W. H. Evans, President, in the chair. Members present: Drs. E. C. Evans, Trader, King, Jones, Mayfield, J. A. C. Brown and Neale. Visiting Brother: Dr. A. V. Small.

There having been no regular meeting for nearly twelve months, and the previous minutes being incomplete, were read, and, on motion, Dr. King was appointed to assist the Secretary to correct the minutes and place them on record, after which they were approved.

There being no unfinished business, the resolutions to amend Article VII of the by-laws was taken up, viz.:

Resolved, That no member of this Society shall be allowed to consult with any physician who is in the habit of consulting with irregulars or quacks, under penalty of expulsion.

After considerable discussion upon the resolution it was unanimously adopted.

There having been no election of officers at the usual time, on motion, the regular order of business was suspended and the officers who were filling the offices were instructed by a vote of the Society to hold over until the next annual election, on the 4th Monday in July, 1879.

There being no report of committees, and nomination of candidates being in order, Dr. E. C. Evans nominated Dr. A. V. Small for senior membership. Dr. Mayfield nominated Dr. Bronson for senior membership.

Dr. Bronson had withdrawn from the Society that he might engage in advertising.

Drs. Trader and Mayfield were appointed a special Committee on Election of Drs. Small and Bronson. The committee reported favorably on Dr. Small's petition. He was therefore elected a senior member, and took his position as such. The committee then asked for further time on Dr. Bronson's case, and for instructions of the Society upon what grounds he shall be received into the Society again. The instructions were "to investigate how far he had violated the medical ethics, and to readmit him, provided that he make known entirely and fully the secret remedy that he had been using in his practice.

Dr. Jacob B. Jones then presented his petition of withdrawal from the Society, having paid his back dues for the last two years past, that he might have the opportunity to advertise. This he done to a greater extent than is allowed by the medical

ethics. After considerable discussion on the subject, on motion, he was allowed to withdraw by a vote of the Society.

On motion of Dr. Trader, $20 of the money in the treasury was appropriated to Dr. Christy, who has for some time been paralyzed. On motion, Dr. Trader was appointed a committee on behalf of the Society to present the amount to Dr. Christy.

On motion, the officers of the Society are to present a written report of their official work for the past year.

On motion, the Society was directed to send to THE ST. LOUIS MEDICAL AND SURGICAL JOURNAL, for publication *hereafter*, the minutes of this Society.

On motion, Society adjourned until the fourth Monday in September, 1878.

SEPTEMBER 23rd, 1878.

Society met pursuant to adjournment, Dr. Dr. W. H. Evans, President, in the chair. Members present: Drs. Mayfield, Small, Trader and Neale.

The minutes of last meeting were read and approved.

There being no unfinished business, and reports of committees being called, Drs. Trader and Mayfield handed in a report on the case of Dr. Ira T. Bronson, which was read and placed on record, viz.:

We, your special committee on the application of Dr. Ira T. Bronson to be reinstated to the Pettis County Medical Society, have the honor to report that, in our opinion, the Society would not be warranted in entertaining said petition.

Dr. Trader then offered a resolution which was adopted by a vote of the Society, viz:

Resolved. That in case any member of this Society may see fit to withdraw for the purpose of practicing illegitimate medicine, contrary to the spirit and letter of the ethics as adopted by the American Medical Association, we cannot reinstate him upon petition or recognize him as a regular practitioner of medicine.

Drs. Trader and Mayfield, as special committee on Dr. W. O. Dunlap's petition for senior membership, reported favorably, and the Secretary was directed to notify Dr. Dunlap of his election.

The Treasurer then made his report for the past year, which was received and approved.

Dr. Mayfield offered a resolution for the protection of the members of this Society from imposition by those who "deadbeat" their bills, to be known as the *black list*, viz.:

Resolved, That each member of this Society residing in the City of Sedalia be required to report a list of all patrons who refuse to pay reasonable medical bills, and who are not objects of charity; and that no member will be at liberty to attend professionally such persons or families until such bills have been paid.

This was adopted by a full vote, and directed to be placed on the records.

On motion, the Secretary was directed to have a number of blanks printed of said list for the use of the members, with the above resolution printed thereon.

On motion, the Secretary was directed to have a number of certificates of membership of this Society printed for its use.

Dr. Trader made a motion that the Secretary receive a salary sufficient to enable him to attend to the duties of his office, and to employ an amanuensis, if necessary, to keep a good and neat record of the Society.

Dr. Trader was appointed to read a paper before the Society at its next meeting, after which the Society adjourned.

OCTOBER 21st, 1878.

A called meeting, Dr. W. H. Evans, President, in the chair. Members present: Drs. Mayfield, Trader, Small and Neale.

The minutes of the last meeting were read and approved.

There being no unfinished business, the President stated that the meeting was called to hear a paper from Dr. Trader, entitled, "Our Surroundings." On motion, the paper was received and directed to be sent to THE ST. LOUIS MEDICAL AND SURGICAL JOURNAL for publication. Very complimentary remarks were then made by the members present upon the merits of the paper.

There being no more business before the Society, it adjourned until next regular meeting.

I. R. NEALE, M. D. Secretary.

OUR SURROUNDINGS. By JOHN W. TRADER, M. D., of Sedalia, Missouri.

Man is not only, to a great extent, the creature of circumstances, but he is being constantly wrought upon after coming into life by his surroundings. The theory of the "survival of the fittest" does not apply to race alone; but the elements in which we move may overcome us and fashion us after their own liking. Cannibals inhabit the forests with carnivorous animals and partake of their natures. The nude denizens of the tropical clime divide their time with the sloth. All nature to them is sluggish. The streams barely move in their quiet journey to the sea. There are no cateracts, no bounding mountain torrents to awake nature from its slumbers. Men come and go with a tardy step, and scarcely conjecture why they live. The beautiful powers of the imagination that are born of flowers and songs

and the sweet murmur of the brook lies dormant in the chambers of thought. There is a purer atmosphere encircling the hills. We are taught that better, that holier life from the summit of Mount Sinai, while confusion of tongues and discord are engendered in the plain. Heroes come from the mountain's crag and insecure dalliance from the valleys below.

This is not altogether fancy. I speak the truth, devoid of figure, when I say that you and all of us are feeling the influence of our surrounding to-day.

Who is it that will deny the power of association upon our social being? Now, as thousands of years ago, is the fact demonstrated that "evil communications corrupt good manners," and that "the companion of fools shall be destroyed." No less is our physical being influenced and molded by the place and circumstances in which we live. The ruddy mountaineer, like the deer of his native highlands, sleeps with his feet well under him, so that by a single bound he may be out of danger. Diseases are as indigenous to locality as are the fauna and flowers. Not that species will not distribute, but that in unfavorable surroundings they can not develop their powers. Take the puny deer of the Louisiana lagoon and compare him with his stately brother of the north, and you can hardly recognize the same species. So also in regard to the human race. Take an indigenous stock whose ancestors for generations back have inhabited the low marshy lands, and as he leans up against his adobe shanty like a new-made moon, you can scarcely detect the brotherhood that exists between him and his full orbed kinsman of more salubrious climes. Let the surroundings be unfavorable and no extra effort can conquer the tendency to degeneration. Intellectually, morally and physically this decay and blight is surely going on. No doubt but there are bright spots, and gentle zephyrs that fan them as they lie imbedded in the old ocean. Songs there may be, but they are only songs of requiem. The intelligence that sparkles in an unfavorable zone, and like a meteor lights up everything for a moment in its train, is a mere wanderer from higher plains. No progeny is left to take their place, and the good they had was interred with the bones.

Whatever cause may operate to physically impair the individual materially affects him in all the relations and duties of life.

Taking advantage of this fact we wish to call attention to the physical conformation of the earth in relation to the distribution of diseases.

Geographically speaking, the disease realm is marked by lines of moisture north and south of the equator. "There are facts to show that some diseases are so completely under the influence of temperature that they are susceptible of being arranged systematically in zones of geographical distribution." Isothermal zones bear a most prominent part in relation to the distribution of all

zymotic disorders. They connect various parts of the earth which have the same mean temperature. Humboldt was the first to notice this fact and point out its existence. Satreille was the first to notice this peculiarity existing in the insect realm. Malarious fever, yellow fever, typhoid fever, plague and typhus fever have their particular zones, and rarely ever invade districts of country remote from their habitat unless the conditions of their life are complied with, either in climatic changes or accumulations of filth. The fortieth parallel north and south of the equator will probably limit the isothermal line of Humboldt, in which the mean temperature rises 77°, and which becomes the home and breeding place, so to speak, of those thermal fevers. They rarely occur beyond this their natural limit unless invited thither by some unusual occurrence, and then never become indigenous. All paludal fevers of this type select low flat countries, the altitude rarely exceeding 300 feet. The great centers of these malarious diseases in America are the shores of the Gulf of Mexico and the low lands of the South. The mortality from them reaches as high as 75 in 1,000, and yet this fearful mortality does not seem to attract attention unless some sweeping epidemic as the yellow fever the last summer in the Southern states sweeps over the country and appals by the magnitude of its destruction. North of the fortieth parallel the character of the diseases change. We now have a more sthenic form. Catarrhs, colds, rheumatism, inflammatory fever and consumption prevail.

It is not claiming too much for science to say that ample means may be provided against the propagation of these diseases. Both North and South the disorders that afflict man may be so far modified that the death rate can be reduced from the fearfully high one above given to 8 or 10 to the 1,000. As to epidemics, there can be no cause operating ever so fiercely, but may be changed and rendered in a manner harmless or removed altogether. In the South we want better drainage and a thorough interment or incremation of all decaying animal matters. In the North we want better homes—homes that do not invite disease by irregular temperatures and bad ventilation. Miss Nightingale, in her pamphlet "How to Live and not Die in India," did much in bringing before the English government the necessary improvements urged by the local Army Board.

Let the main cause of disease in India—want of drainage, want of water supply, want of proper homes—"remain in all their primitive perfection."

After we have redeemed the land from those natural disease-producing causes by drainage, etc., we, on the other hand, must see to it that we do not become our own destroyers. The deleterious emanations of all carnivora or flesh eating animals are eminently poisonous. Modern science, or, more plainly speaking, common sense, teaches us that this great evil, the

source of so much misery and death among the human family, can in a great measure be remedied or avoided altogether. In that admirable system of laws which governed the Jewish people, and which we look upon as being of Divine origin, our physical as well as our spiritual well-being has been amply provided for. What do you suppose would have become of the Jew who would have cast the refuse of his body into an overflowing cesspool which, by its stench and putrefaction, would have not only made the surrounding atmosphere unpleasant, but absolutely hurtful and dangerous to every one breathing it? We know that if nothing worse had befallen him expatriation from Jewish fellowship would inevitably have followed such a course. The Jew was commanded that, when he should go out to ease himself he should not only go without the camp, but he should provide himself with a paddle and carefully and effectually cover up the excretion of his body. We see, also, instinctively implanted in the nature of carnivorous animals a command for a like service. The dog and cat, our most familiar domestic animals, exhibit the impress of this law. Not so perfect, it may be, as when they roamed unrestrained in their native forests and plains, but a law nevertheless. Their association with man may have had something to do in causing existing discrepancies. Dogs, like men, are prone to depart from rectitude, town dogs and town men are notorious in this respect. The importance of this one fact, that the defilement of our own bodies brings disease fierce and fatal upon us, it would seem should have long since established a law of expedience, if nothing more, to correct this evil. Does it not appear absurd to rational beings that this great sin of uncleanliness (for it is nothing more nor less), should remain so patent in a day and age of such universally diffused knowledge? Yet this is the case. City councils and municipal authorities, in many instances, although convinced of the importance of these sanitary reformations, refuse to act. The long funeral cortege moves silently on, while the mourners sigh over the sad dispensation of Providence, not stopping to think that within the limits of their own powers lies the remedy for all this woe. But then we have cause to hope. The people of this age are becoming too intelligent and cultivated to refuse obedience to the just demands of a well regulated state medicine. The time has come when dirty streets and pent up sewers shall be disgraceful to a community. And when we have cleansed our streets and purified our alleys, we should see that there exist no pestilent-breeding nidus in our homes and around our firesides. A very intelligent lady has said that typhus fever may exist in a dirty dish-rag, and modern science and common sense will certainly endorse the assertion.

OCTOBER 21st, 1878.

ROLLA DISTRICT MEDICAL SOCIETY.

Synopsis of the proceedings of the Tenth Semi-Annual Meeting in Rolla, Phelps Co., Mo., Tuesday, Nov. 26th, 1878.

The Society met in the Court-house, and was called to order by Doctor S. S. Harris, Vice-President.

Dr. J. T. Coffee was appointed Secretary *pro tem*, and the minutes of last meeting were read and approved.

Drs. Glenn, T. J. Jones, and McManigle were appointed a committee on programme and order of business, after which the Society took a recess until 2 P. M.

AFTERNOON SESSION.

The Society met at 2 P. M., Dr. Harris in the Chair.

Committee on Programme reported, and Dr. W. E. Glenn, from the Special Committee on "Expert Testimony," appointed at the last meeting, presented a lengthy and thorough report in which the usages in Iowa und other States, as well as the decision of the Supreme Court of Indiana in the case of Bochman *vs* the State of Indiana, were cited.

He reported further that, acting on the expressed views of the members during the preceding meeting, the chairman of the committee refused to testify as an "expert" in the Circuit Court in Phelps County without the recognition of a proper fee. A lengthy discussion followed, when Judge Hill decided, in view of the decision quoted, of the Supreme Court of Indiana, that while he could not require the payment of extra compensation, he would not in future consider such refusal a contempt of court, punishable with fine or imprisonment, and notified the members of the bar to make their own arrangements with "expert witnesses" prior to producing them in court.

The report concluded with a resolution requiring members to take a decided stand on this question, and requesting the State Senator of the district to bring the matter under the consideration of the next General Assembly.

The report and resolution were both adopted unanimously.

Dr. McManigle asked the opinion of the Society as to the propriety of removing a tumor, large as the closed fist, attached to the lumbar region of a new born infant. It was deemed entirely safe and advisable, under the circumstances, to employ a rubber ligature.

Dr. Coffee read an interesting paper on "Fevers," which evoked considerable discussion, in which Drs. Jones, Headlee, Lenox, Bradford, McManigle, Harris and Glenn freely joined.

Dr. Glenn remarked that the discussion of such familiar subjects with which all were so conversant, abounded with inter-

est that never wearied, every one having experiences that were instructive and of practical utility.

Dr. A. L. McGregor presented a case for consideration and the diagnosis of the Society. The patient had a mush-room-like growth on the floor of the mouth of four months' existence. After examination, the opinion was divided between epithelioma and epulis, a majority inclining to the latter. Treatment recommended, excision. The meeting then adjourned to 7 P. M.

NIGHT SESSION.

The Society met promptly at 7 o'clock.

Dr. McManigle reported two cases: The first was one of imperforate hymen. The sufferings of the patient, who was fifteen years old, were very great and had continued for some fifteen months. After considerable difficulty and opposition he succeeded in obtaining an examination. Assisted by Dr. Harris, he punctured the tense and bulging hymen, liberating half a gallon of extremely fœtid and dark colored fluid, with immediate relief. So averse was the girl to any examination that it became necessary to hold her.

The event was quickly heralded through the country neighborhood, and the relif or cure so apparent and pronounced, that the Doctor had an immediate application from a couple who had been married nine years without sexual congress being effected. An examination of the wife developed vaginismus of so severe a character as to prevent admission even of the little finger, the spasm and pain being uncontrollable and intense. Not having Sims' dilator, Dr. McManigle made one out of hard wood and succeeded in a short time in producing the necessary dilation, which permitted sexual intercourse for the first time in their married life. The lady is now pregnant and her perfect cure assured.

After a highly interesting and pleasant meeting, adjourned to meet in Rolla, on the last Wednesday in May, 1879.

T. J. COFFEE, Secretary, *pro tem.*

SOUTHEAST MISSOURI MEDICAL ASSOCIATION.

The following is a synopsis of the meeting of the Medical Association:

The Fourth Semi-Annual Meeting of the Southeast Missouri Medical Association, convened at Cape Girardeau, Tuesday morning, December 3rd, 1878. Although the attendance was small, yet the meeting was most interesting and instructive.

Each member seemed to think, as the attendance was small, it would devolve upon him, to perform additional duty in order to compensate for the loss in number, and suiting the action to

the impulse, took hold and worked with a vim and energy that characterizes the workings of very successful meetings.

This Society, although, yet in its infancy, is on a basis so firm that it may be classed with the permanent organizations of the country, its membership now numbering just forty; and among that number may be found the names of the ablest, most enlightened and learned physicians in Southeast Missouri.

Several papers were read, and each was exhaustive upon the subject treated of. The merits of each paper, pro and con, were taken up and freely discussed.

Several cases were cited in full, including the nature, cause, duration and treatment of the subject under consideration. A very important part omitted is that of the Counselor's reports of the various counties. Dr. W. B. Wilson, of Cape Girardeau, being the only counselor present, his report was brief, but to the point.

The Society received the reports of several committees. Perhaps the most important was on Constitution and By-Laws. The report was received and the committee discharged. After being read the second time the Constitution and By-Laws were adopted, as amended. The adoption necessitated the appointment of several committees, and a Corresponding Secretary. The committee most worthy of note, was the one on Petitions for Membership. The Chair appointed Dr. W. B. Wilson as Chairman, with Drs. Henderson and Harris as assistants. The Chair also appointed Dr. C. G. Wilson, the present Recording, as Corresponding Secretary to fill the unexpired term.

The citizens of Cape Girardeau were exceedingly kind and hospitable. The Turners tendered the use of their hall, proposing to light and warm it, free of charge. The Court House was also tendered. Prof. Dutcher, principal of the Normal, extended a very cordial invitation to the Society to visit the school, which they did *en masse*. Dr. W. B. Wilson gave the Association a dinner on Wednesday, and the physicians of the city a supper at the hall, at the close of the evening session.

A most interesting case presented for examination was that of Dr. W. B. Wilson, of an ulcerated toe, wherein the original toe had been amputated, and the parts, instead of healing by first intention, gaped open and inclined to slough. The Society concurred in the treatment as adopted by the Doctor, and urged him to continue the treatment already established. Another case was that of Dr. Rider, of a fibrous tumor on the right lower lid, near the outer angle of the eye. The instructions of the Society were to operate.

In my enumeration of committees I failed to notice the appointment of Committee on Essays, of which the following is a summary: On Obstetrics, Dr. W. B. Wilson, of Cape Girardeau; On Diseases of Women, Dr. Wm. Nifong, of Fredricktown; On Surgery, Dr. C. G. Wilson, of Cape Girardeau; On Prac-

tice of Medicine, Dr. J. D. Porterfield, of Commerce; On Cholera Infantum, Dr. A. A. Bondurant, of Charleston. A motion prevailed requesting Drs. Mann, of Perryville, and Rider of this place, to deliver at our May meeting a debate on the "Doctrine of Humeral Pathology." Dr. Mann assumes the affirmative and Dr. Rider the negative. The Society is expecting a treat of rare merit.

Adjourned, to meet at Charleston, the county seat of Mississippi County, on the first Tuesday in May, at 7 o'clock P. M.

C. G. WILSON, M. D.

CAPE GIRARDEAU, MO., Dec. 9th, 1878.

Clinical Reports from Private Practice.

AMAUROSIS PUERPERALIS TRANSITORIA. By DR. CARL WALLISER, M. D., of Highland, Ill.

Mrs. B., aged 18, primipara, from Highland, Ill., gave birth to a child on the morning of October 7, 1878. She was greatly depressed, having lost her eyesight during the last labor pains. I was called in the next morning and received the following information from the midwife: Labor began at 7 A. M.; at 10 A. M. the liquor amnii flowed; head in first presentation. As the midwife had an appointment in the country, and being unwilling to abandon the patient before the final delivery, she ordered her to assist by pressing as hard as possible. The child was born before 11 A. M. At the very instant when the occiput passed, the woman fell into convulsions, and the hitherto strong labor pain ceased. The child, although alive, soon after died. The afterbirth followed half an hour later, and could only be tracted after several applications of Crede's method. As the midwife was formerly in the habit of pulling the cord, I had advised her the use of the less dangerous method of compression upon the abdominal wall. There was no hemorrhage.

The convulsions ceased soon after 12 M. At this time the patient asked her nurse to light the lamp in order to see her baby. She could hardly be convinced that it was broad day

light; from this time on until my arrival early next morning her anxiety on account of loss of sight constantly increased.

On examination twenty hours after delivery, her head was red and somewhat painful to the touch. It showed a much higher temperature than the remainder of the body. The expression of her face was one of suffering. Although she was fully conscious, her sadness was so deep that I feared a fatal issue. Skin dry; tongue moist; neither appetite nor thirst; no alvine evacuation for three days; pulse 104; temperature in the axilla, 38.5° C; eyes staring, both pupillæ rigid, dilated, not sensible to light. Her excitement did not permit an ophthalmoscopic examination. Her breasts were almost empty. The inspection of the vulva showed several small superficial rents and a deeper one; vagina narrow, conjunctivæ not shortened; os tincæ lacerated; canalis open; discharged lochia fœtid; urine containing some albumen.

I ordered 20 grains of calomel to be taken in 5 grain doses every two hours; application of ice on head and neck; vaginal injections of a three per cent solution of carbolic acid every three hours; a bag impregnated with carbolic acid to be applied on the wounds and to be removed frequently. I insisted upon the midwife invariably washing her hands and anointing them with ten per cent carbolic oil, previous to any injection or exploration.

On my next visit the patient was in very low spirits, although her physical condition had improved. She had had several liquid stools, also good perspiration during the night, but she was afraid that she would never regain her eyesight. Pulse 94, temperature, 38° C. As I approached a burning candle to her eyes I thought I noticed a slight contraction of the pupillæ. The patient was now able to distinguish light from darkness and to tell correctly whether the candle was burning or not. Discharges of the genitals without fœtid odor; rents healing. On the next day both temperature and pulse were normal and the patient counted correctly the number of fingers held up before her. From that time she improved rapidly, and was able to read a newspaper two weeks after delivery with perfect ease.

I recollect another case of amaurosis transitoria which occurred some years ago, during my hospital practice in Germany: A young man suffering from stenosis valvulæ mitralis, became suddenly blind in consequence of a mental excitement. Ophthalmoscopic examination resulted negatively.

Correspondence.

CHICAGO, Dec. 17, 1878.

EDS. JOURNAL:—I enclose you a short article for your journal with the following object: The carbolized hypodermic injection of hemorrhoids practiced by the itinerants is a valuable treatment provided it is safe. I discovered and published their secret some two years and a-half ago, but suggested that the throwing of carbolic acid into venous tumors might involve a risk of fatal embolism. So much time has elapsed that, if there be any real danger, it should by this time be manifest, but if there is no risk the plan is a splendid improvement. My object is to get information from the whole of the adjacent States, and then to prepare an article giving the results of the inquiry. For this purpose I have sent a similar paper to two or three other journals, and will communicate my results to you and them simultaneously, I shall also employ private correspondence in the investigation:

IS THE HYPODERMIC INJECTION OF PILES DANGEROUS?—About two and one-half years ago, I discovered and published to the profession the secret method of the itinerant "pile doctors."

The plan of these itinerants, which was held as a secret, and at a high price from one quack to another, is substantially as follows:

A hypodermic syringe, with a very firm, sharp point is charged with a strong solution of carbolic acid. Generally three parts of crystalized acid to one of bland oil are employed, but they sometimes combine in equal parts, and for the oil occasionally substitute glycerine.

The method of the operation is to insinuate the point of the syringe into one of the piles, and throw in a few drops of the solution. This causes the hemorrhoids to turn white and gradually wither away. Another one is then attacked, and thus by degrees a complete cure is effected without causing enough irritation at any time to take the patient away from business. The operation is sometimes painless, but in other cases decidedly otherwise.

Attention was called to the seeming danger that, by this method, the carbolized oil might be thrown directly into the dilated hemorrhoidal veins. The injection of coagulants into venous enlargements of other parts of the body has, in a few cases, caused sudden death by embolism, a portion of the clot being carried to the heart and thence passing into, and blocking up the pulmonary artery. It was suggested, therefore, that

the injection of hemorrhoidal veins might involve the same risk. The three groups of hemorrhoidal veins intercommunicate, but the main outlet of the lower and middle groups is to the internal iliac and thence to the heart, while that of the upper is to the portal vein. It is conceivable that dislodged clots or globules of the injeetion might be swept by the current of the blood to the heart, or, possibly, might pass through the upper plexus into the the portal vein, and be lodged in the liver. I learn that a number of the itinerants have taken warning from my suggestions of danger, and employ a sort of clamp forceps to compress the base of the pile for a few moments at the time of the operation, thus hoping to prevent the passage of clots or globules along the veins.

This method has now been in use over three years, and has been applied to thousands of persons. If there be any actual danger in it, such as is suggested by anatomy, and by the dangers of similar injections in other regions, by this time the result should be manifest. Experience only can settle such matters; if on the other hand the method is safe, it ought at once be adopted by the regular profession as the best method of dealing with this distressing disease.

To settle this question of danger, I take the liberty, through the columns of this JOURNAL, of asking every physician in the United States, who has had an opportunity to know the results of this treatment, to write to me immediately, giving information on the following points:

1. How extensively has the plan been tried in your region?
2. How far is the plan painless or otherwise?
3. Have any sudden deaths or other alarming symptoms been known to follow its application, and how soon, and what were the symptoms?
4. Have any cures been followed by dangerous disease of the liver?

I propose to collect all the information thus gathered, and communicate the result in a future article through the pages of this JOURNAL. Please address,

EDMUND ANDREWS, M. D.

No. 6 SIXTEENTH STREET.

THE PROPHYLAXIS OF YELLOW FEVER.

EDITOR JOURNAL:—The proposition made by me in a letter to you last summer, relative to the freezing out of yellow fever, is not so impracticable as you seemed at the time to think.

If this monster plague is ever managed the teachings of nature must be followed. His voice has already been heard and the plague has for the time been stayed.

The present winter appears likely to be a mild one and an early spring and summer may bring back all the horrors of the past, unless our medical brethren in the South are wiser than they have been heretofore.

When the first cases appear next summer, if yellow fever should then come again, let no more efforts be made on the part of the physicians to the South to convince themselves that the cases are only bilious or malarial, but let the facts be candidly admitted, and the spread of the disease combatted by the only known means in their power namely, the free, unstinted use of ice.

Let cargoes of ice be placed in the infected localities, piled in suitable quantities about the doors and windows of the infected houses, the opening of sewers and privy and gutters, and even in the rooms of the sick.

When a patient is suspected of yellow fever let him or her be placed in a room, remote from the rest of the family, and a cold room, placed between ice deposited in tubs will answer the purpose, so that the nurses are disinfected as they pass from the sick one.

Let the first infected town and vessels be quarantined with cold. Let every suspected person, passing from an infected town after being bathed, be subjected to a freezing temperature, and put on clothing that has been once frozen.

After cleansing an infected steamer or sailing vessel let the hold and every part be frozen out thoroughly with ice and salt, or sulphuric ether. The plan would be less expensive than the funerals that will follow its neglect, to say nothing of other more important considerations. It is practicable and can be carried out, though I have not now the time to write *in extenso* on the subject. Yours truly, C. H. HUGHES.

Book Notices and Reviews.

AGNEW'S SURGERY. Volume I. THE PRINCIPLES AND PRACTICE OF SURGERY. Being a Treatise on Surgical Diseases and Injuries. By D. HAYES AGNEW, M. D., L. L. D., Professor of Surgery in the Medical Department of the University of Pennsylvania.

The author begins his work with a chapter on surgical diagnosis, which indicates something of the character of the writer and of the book which is now presented to the profession. He is evidently a careful, methodical and honest worker in the practice of his profession. The judgment and advice of such a man is well worthy of consideration, and his large experience and widely-extended knowledge have enabled him to present to us a surgery which will be a safe and judicious counselor to the practitioner. The book is carefully prepared, accurate in its details, and often exhaustive in its research. The author asserts that the surgeon must also be a physician; and he certainly appreciates the fact that a careful analysis of the case and an impartial judgment of its necessities are more important elements of a surgeon's character than mere manipulative skill, however necessary that may be.

In his chapter on Inflammation, he states somewhat concisely the present views on that subject, bringing the subject airly up to the present time, but leaves, of course, unse tled the uncertain and disputed points, which no theorist can establish, and which can find their solution only in facts to be gained in the laboratory of the physiologist. He then gives a synoptical review of the history of the nature and causes of inflammation which is interesting in the light of our present knowledge, and especially so to those of us who have not studied its history, who have not time to trace the many changes in its theory.

His chapter on wounds is well considered, describing not only the different wounds, but the accidents to which they are liable in their progress toward a cure.

In excision of the infraoroital nerve he gives preference to the old semilunar incision with base on infraorbital ridges, and the use of the trephine, merely mentioning the division of the nerve near the spheno-maxillary fossa by tenotome and its subsequent extraction by pulling on the nerve at its escape from the infraorbital foramen, an operation which has the sanction of Langenbeck, and which is certainly less destructive and equally as certain in its results.

In excision of the inferior dental nerve, he says, "I make a horse-shoe flap over the ramus of the jaw and masseter muscle, convex downwards, one inch and three-quarters in its vertical extent, reaching almost to the base of the jaw, and one inch and a-half in its diameter. This flap is then raised upwards, exposing the ramus, the external wall of which must next be cut out with a trephine, applied half an inch above its angle, and about five-eighths of an inch behind the last molar tooth."

"The nerve which will be exposed with its accompanying artery in the inferior dental canal, should be removed to the full extent of the opening made by the trephine. The bleeding which follows the division of that artery will sometimes prove obstinate. In one case I was compelled to apply the actual cautery, though usually compression or a plug of soft wood forced into the orifice of the canal for twelve hours will be all that is necessary. The wound in the soft parts should be adjusted with two or three interrupted sutures and treated as though it were an ordinary incision."

After mentioning one or two other operations, he passes to another subject without noticing, in any way, an operation devised and practiced by Dr. Jno. T. Hodgen, of this city; an operation simple in its character and efficient in its results; one which leaves no deforming scar to mar the pleasure of the relief it brings. In this operation the nerve is reached by cutting through the mucous membrane and tissues covering the jaw behind the molar, at the junction of the ramus and body, and is described by the author in the Transactions of the Association of the State of Missouri for 1876, on page 25, as follows:

"With a strong knife, a cut one inch long, well down upon the bone, is made in the length of the jaw, beginning at the base and a little to the inner side of the coronoid process of the inferior maxillary and extending forward. The periosteum should now be separated to the width of one-fourth of an inch.

A small drill, driven by a dentist's engine, has its point placed one-fourth of an inch in front of the posterior termination of the incision and directed downward and backward. The firm shell of the bone is soon penetrated, and this will at once be recognized by the hand of the operator. Any resistance to the right or left will indicate to the surgeon that the hard shell on the outer or inner side is being cut, and the drill should be turned in the opposite direction, so that it will be kept in the open porous tissue filling the dense case forming the outer layers of the bone. In a few seconds the canal containing the nerve will be reached, and its thin wall opened. A twinge of severe pain with a more free flow of blood, announces that the nerve and vessels have been cut, and this should be done as near as possible to the entrance of the nerve into the posterior dental foramen. Now a burr replaces the small drill. With this the opening is enlarged, the nerve again reached, and this may be known of course by

the pain when the central end is touched. The free end of the burr is directed forward, and the nerve cut toward its distal termination, and as the central end is not disturbed, this will be painless. Loss of sensibility in the lip, chin and gums attest the success of the operation. Hemorrhage soon stops of itself, or if it continue (as it has not done with me in any case) the opening in the bone affords every desired facility for making pressure by plugging. I am indebted to Dr. Wm. Morrison for the suggestion that the drill be first used to open the bone and the burr afterward to remove a longer section of the nerve." Dr. Hodgen, now in addition, when necessary, makes an incision downward through the mucous membrane just outside the second bicuspid tooth and hooks up the nerve and draws it out of the osseous canal through the mental foramen. I have quoted thus at length the description of the two operations in order that readers may note accurately the points of difference. The one involves an ugly cicatrix and an extensive destruction of bone, and, as the author states, the necessity of occasionally leaving the wound open to arrest hemorrhage, while the other is neat, leaves no scar, the hemorrhage is easily controlled and it is efficient in its result.

The author devotes sixty pages to the subject of ligation of arteries. In the opening paragraph he insists upon the necessity of minute and accurate anatomical knowledge, which he properly asserts can only be obtained in the dissecting room, but the elaborate illustrations make as clear and plain as is possible by illustration the relations and importance of the various parts concerned. The cuts are well chosen and exhibit only such parts as are necessary to the special ligation considered.

They are not encumbered with confusing minutiæ of minor importance. It is an admirable chapter, and especially valuable to those who cannot each year study anatomy in the dissecting room, but is materially weakened by the multiplicity of unimportant anatomical facts which are mentioned in detail in the text, and which, though important in a text book on anatomy are confusing and unnecessary in a work designed to help the practitioner in preparing for a special work.

On page 742, in referring to fractures into joints, he urges the cautious use of passive movement at the earliest possible moment without giving the indications to guide the practitioner to the proper solution of the time for it, viz.: when little or no pain is produced by the movement and the fragments are united.

The tabular statement he presents of ununited fractures and their treatment, with result, is a most complete and valuable one. It is comprehensive and is indicative of labor and careful research of publications of the last thirty or forty years.

On page 732, in the general consideration of fractures, he states that "fractures which extend through the articular encrust-

ing cartilages seem to have no power to unite." Standing as it does in the text in close relation to other fractures which frequently fail of bony union, we hardly know how to reconcile this statement with the well-known fact that fractures into joints do in the majority of cases unite readily and almost certainly. It is possible, however, that the author intended to refer only to the cartilage which it is well-known proliferates laterally very slightly and with difficulty, leaving very generally at the site of the fracture a depressed groove.

He then gives a table of the special fractures treated in the Pennsylvania Hospital since 1850, numbering 6,485, with the result, so far as known; and to this, in some of his generalizations, he adds those treated at that institution from 1830 to 1850, numbering 2,182, making a total of 8,667 cases. In the treatment of fractures of the femur, he thinks we should be satisfied with half or three-quarters of an inch shortening. This is a sufficient number of cases to justify some generalizations and to indicate clearly to the author the results attending different plans of treatment. He thinks we should be satisfied with half or three-quarters of an inch shortening in union of fractures of the femur. This is probably a safe limit, and is a standard which the author of a surgical treatise can surely defend; but we think that many American surgeons do better than this would indicate, and I am satisfied it is the exception in the hands of some surgeons to have a shortening so great. He dismisses the treatment of these fractures by extension and suspension very briefly, and evidently does not favor the plan, nor does he seem to recognize the fact that there is now a very respectable minority of the profession who advocate this plan of treatment, and who are using with satisfaction Hodgen's suspension splint. The author seems to think that Dr. Hodgen uses the splint only *occasionally*, whereas it is a fact that he uniformly uses it for all fractures of the femur, both in children and adults. It gives a stability and security to the fractured extremities that cannot be attained in any other way, with the comparative freedom and comfort to the patients that it affords. But, whatever may be the author's appreciation of suspension, he certainly has a due regard for the value of extension, for he advocates and practices the use of a fifteen-pound extending weight in the treatment with Buck's method or its modifications.

The volume is a worthy one, and if the second one evinces as much care and as thorough preparation, the work will be valuable as a guide to the practitioner and as a book of reference to the student. It has evidently been the work of years of systematic preparation. The illustrations, numbering 897, are well executed, many of them very important and new. Although needessly profuse in many instances, they generally add force to the text.

H. H. MUDD.

A PRACTICAL GUIDE TO DISEASES OF THE THROAT.—With one hundred typical illustrations in color and fifty wood engravings designed and executed by the author, Lennox Browne, F. R. C. S. Ed., Senior Surgeon to the Central London Throat and Ear Hospital; Surgeon and Aural Surgeon to the Royal Society of Musicians; Surgeon to the National Training School for Music, etc. 8 vo., pp. xii., 351, London: Baillière, Tindall & Cox, 1878. The same, Philadelphia: Henry C. Lea, 1878.

We remember to have read within the last two or three years, with some degree of interest, articles on subjects connected with the throat, from the pen of Mr. Browne, in several of our medical journals. This, with the knowledge that he was assistant for a number of years to Dr. Mackenzie, in the London Throat Hospital, which afforded him ample opportunity for pursuing the study of the subject of his book, predisposed us to look with great favor upon the work. Another reason for our favorable predisposition toward it, was that it had received the favorable notice of some of the best known critics, and that it came from two houses known to be careful as to the kind of book they undertake to publish. In this instance the publishers have done their part well. The volume has a finished appearance, and if the broad margins, thick paper and large type increases the cost, they also add to its beauty.

After a very careful reading of this book, we are forced, reluctantly, to say, notwithstanding its fine appearance, notwithstanding the very favorable notices it has received, that we are greatly disappointed. We find that that which is true is not new, and that the new facts are very few in number. Certainly, with his opportunities for accumulating new and important truths, and with the long interval between the issue of this book and that of the last English work on the throat, a greater advancement ought to have been shown. The time is past when the profession will be satisfied with a compilation or with a remodeled book containing old ideas. He who would burden us with a new book, must, at least, place in it some material advance in both pathology and treatment, or take the consequence of his book being left on the hands of his publishers.

As this book has had several able defenders, we think that it can stand a little criticism. In the interest of the readers of the JOURNAL, and because we do not want a book unworthy the place commended as a leading authority in a speciality now so generally recognized, we will undertake to show that it is *not* a better "practical guide to the diagnosis and treatment of diseases of the throat," than many books that we have already on our shelves.

If we except the artistic though too highly and too uniformly colored plates, there is but little to commend in the work. According to our method of viewing the subject, the author com-

mits an inconsistency in displaying this "Atlas," without at the same time recording in detail the history of each case illustrated. He says (page 2), "histories of cases in detail have been purposely excluded." Why exclude pen pictures and include lithographic pictures? Was it because the latter make a better showing than the former? The statement that clinical study can only be efficiently pursued in the presence of the patient, applies as well to the presentation of lithographic pictures, for it is certainly as difficult to represent on stone the true appearance of a diseased larynx or pharynx as it is to describe it on paper. If the history of a case is "but rarely of service to the student" it follows for the same reason that the lithographic representation of the same case must be equally as unserviceable to the same student. A truthfully colored picture can be made much more useful to the student if accompanied by an accurately and concisely written history of the case from which it was taken; that is to say, neither picture nor history alone, can give all the information that is desired.

Mr. Browne unaccountably, but intentionally, omits "questions of purely pathological interest." It is difficult for one who has made the study of the diseases of the throat a specialty, to understand what inducement could be employed to prevent him from writing on this most interesting and important subject, for certainly he must have been *prevented* from so doing. Although he omits questions of purely pathological interest, he devotes a chapter to the anatomy of the larynx, but is silent on the anatomy of the pharyngo-nasal cavity. He gives less than nine lines to pharyngeal paralysis; to the uvula he gives eight pages (!). On the first of these eight pages he misplaces the relationship of cause and effect. On this page he makes the relaxed uvula serve "to make the throat peculiarly liable to catarrhal attacks." This may be new, but it is not true.

A few of the inaccuracies are: "formulæ for diseases" (pp. 305, 307, 309, etc.); the first removal of a laryngeal growth is stated to have been done by Lewin (page 248). This is not the case, as it is well known that the first operation of this kind was performed by von Bruns in the case of his own brother in 1860. The inaccuracy of his method of making a diagnosis of conditions giving rise to foul breath is an amusing one. Of course a patient with an ulcerated tonsil might at the same time have an ozœna, but the disagreeable odor from the nostrils could not of itself determine whether it was from a diseased tonsil, the nasal secretions, or of pulmonary origin.

Although the omissions are not remarkable in number, yet they are in kind. In Fig. 54 he represents the lodgment of a pin in the larynx, but no mention is made in the text of foreign bodies in this organ; nor nasal polyse or lupus of the larynx or diseases of the trachea. Another very noticeable omission is, that although he is constantly indebted to others for

the information which he employs in making up his book, he refers but seldom to their opinions, and not infrequently quotes them for the sole purpose of employing them as a foil to his point (pp. 199, 222, 240, 255, 277, 283, 286, 332, etc.).

There are several misstatements also, one of which is: "Absence of thickening is a marked characteristic of chronic laryngitis, to which may be added immunity from ulceration," (p. 199). A three months' student would hardly make such a mistake. Another one is, "the vocal cords have the power of lengthening and contracting;" according to this he would give the bones of the lower extremities "power" to move the body.

Mr. Browne seems to think that the profession has been very greatly deceived as to the effects of the removal of laryngeal growths through the mouth; he says, "that instead of their being innocuous, direct injury of the healthy parts leading to fatal results is by no means of infrequent occurrence;" "however able a laryngoscopist the operator may be, he is, in ninety-nine cases out of a hundred, guided in his knowledge of the exact situation of the growth by previous examination; and when he operates, the larynx spasmodically closing around the instrument as soon as it passes the epiglottis, the growth is caught according to his skill, or, more often, according to his good fortune." Of all the operations that the surgeon is called upon to perform, that for the removal of an intra-laryngeal growth is the *most difficult*; but the man that would, regardless of consequences, or for fear of conveying an impression to his patient that his skill is inadequate to the occasion, press his forceps into the larynx and make a "hit-or miss grab," for a growth is guilty of an act that is *most reprehensible*. There is no wonder that Mr. Browne is disposed to look with disfavor upon the removal of these growths, if he, in ninety-nine times in a hundred, grasps "an arytenoid cartilage or one of the cornicula." (?) We should with him expect to perform tracheotomy after such an operation, and would be well pleased if a fatal result did not follow it. Another one of his assertions (which he calls a proposition) is that "benign growths not infrequently assume a malignant, and even a cancerous character by the irritation produced by attempts at removal." In over four hundred recorded cases of intra-laryngeal operation for the removal of papillomata in three (Mackenzie, Gibb and Rumbold) cases only did malignant degeneration at the site of the tumor follow after the operation, and, of course, it is not certain that in these cases the change in character was due to the operative interference.

On pages 58 and 59 he says "in point of fact, however, very little of the spray enters the larynx. The moment it impinges on the epiglottis, that valve closes tightly against the entrance of so foreign an intruder." On page 68 he contradicts this by saying "the spray may therefore be projected simultaneously, with the act of inspiration." In neither case does he men-

tion the material used. If he had employed a warm non-irritating spray in the first instance, the epiglottis would not have closed tightly, and if in the second a solution of nitrate of silver had been projected into the throat, the simultaneousness of the act with that of inspiration would not have been of any avail; but such indefiniteness is a feature of the book.

The author is certainly behind the times in denouncing tracheotomy in laryngeal phthisis. With the almost incredibly large experience that he claims to have had, he must, from time to time, have seen cases of phthisis in which the main local invasion was in the larynx. Tracheotomy, as recommended by Elsberg, Janeway, Porter and others, relieves, in some instances, dyspnœa, and other sequences of the passage of air through an irritable larynx.

The style of the author is not very classical and borders on the egotistical. Mention is made to the "author," "writer," "Lennox Browne," etc., etc., over one hundred and twenty times in the three hundred and fifty-one pages. Then we find such expressions as "imperfect bite of artificial teeth," (p. 118); "worked at aural surgery" (p. 47); "lodgment of secretion at a cough-spot" (p. 195); "if there be irritation at any cough-spot," (p. 264). Homorrhage from the larynx is called hæmoptysis (p. 225), etc.

Let us make comparative quotations from this work and a work on the throat that is now about to have a new edition issued. "In the treatment of acute laryngitis it is essential to make a proper diagnosis at an early date, and to treat it promptly and efficiently, bearing in mind that it is an acute disease rendered dangerous, not from the violence of its action, but on account of the locality which is invaded; and that, for this reason, local treatment takes precedence of general treatment. The laryngoscope is here of the greatest service, both as a means of accurate diagnosis and as permitting the efficient application of local measures."

"The systematic treatment of inflammation by venesection—the external use of leeches, the internal administration of remedies acting upon the various emunctories—is not applicable here as in inflammation elsewhere, because we dare not always wait for the action of these measures. In mild cases, the external application of leeches, the use of salines, and the inhalation of the steam of warm water, or of astringent solutions, will be of great benefit, and be thoroughly efficient with perfect rest, quiet and silence. In severe cases, especially where there is œdema, early scarification of the parts (by the method to be described in a later part of this volume) will be of immense service. By this procedure the parts are at once disgorged of their blood; the serum is discharged from the tumid swellings; the local symptoms are promptly relieved, and the respiration is rendered efficient for the purpose of the economy in her own efforts at

cure. It is rarely that a second scarification becomes necessary."

"Where scarification is inapplicable from want of appliances, want of practice or other causes, the trachea should be promptly divided, that the lungs may receive a due supply of air to enable the system to pass through the natural stages of the inflammatory process. This operation of tracheotomy must not be delayed too long, but should be performed at the very first moment that the impediment to respiration is recognized as serious. Delayed too long, the blood will have become so poisoned by carbonization that the relief to respiration will not be followed by efficient oxygenation, and the patient will succumb a few hours after having been relieved of the local symptoms. This is the history of many cases who perished after tracheotomy because it had been postponed for a last resort, when, if resorted to early, the probability is that it would have saved life in at least some of the instances."

Now, let the reader carefully compare the above with the following, and let him decide which of the two sets of quotations were written nearly seven years ago, and which has the more lucid instruction concerning the conduction of a case of acute laryngitis.

"The author would advise in all cases the administration of a calomel purge; and when the pulse is full, especially in the case of strong children, would push this drug steadily, both by its internal administration in small and frequent doses, combined with James' and Dover's powders, and by inunction with mercurial ointment. In adults, after the purge, aconite administered in one-drop doses is of great value. Neither emetics, counter-irritants, venous depletion, nor caustic solutions are to be recommended."

"Locally everything should be done to change the conditions most favorable to the causation of the disease. For this purpose the room must be kept at an equable temperature of from 60° to 65°, shielded from draughts and charged with steam. In the case of children, steam from a kettle playing near to their mouths, or wrung out hot flannels in the same position, will aid to this end. In the adult, the frequent inhalation, from an apparatus causing the least effort, of steam combined with volatile ingredients of a soothing or anodyne character, should be constantly employed. Benzoine, chloroform, conium or hop, are the best remedies for this purpose. External poultices and compresses are soothing."

"So soon as, and wherever, œdema is discovered, local scarification with the laryngeal lancet should be employed. There is probably no such severe disease that can be so quickly relieved by a simple local measure as can œdema of the larynx, and the operation is one of really easy performance to a practitioner having but moderate skill in the use of the laryngoscope. The relief to the local distress and the consequent general comfort of the patient is little less than magical."

"When secretion is poured out as the disease advances the process may be favored by mild expectorants. Ice and iced drinks are very agreeable to some patients, while in other cases warm demulcents are preferred. If, in spite of scarification, or failing means for its adoption, the respiration of the patient becomes more feeble and symptoms of blood-poisoning increase, tracheotomy must be performed."

A majority of the readers of the JOURNAL who are unacquainted with the text of either of the works from which the above quotations are taken, would say that the first set given, were taken from the new work, and that the last came from the work written in the spring of 1872, but such is not the case. The first is from Cohen, the last, from the work under review.

These quotations are *a fair exhibit of the comparative value* of the new and old work; and show that Mr. Browne's book is *not* a better "practical guide to the diagnosis and treatment of diseases of the throat" than some that we have had on our shelves for several years. What need is there for a new book, if there is nothing new to record in it; why impose additional expense when there is no additional gain; why take advantage of the anxiety of the student in medicine to become possessed of every new work in the hope of becoming possessed of improved methods and new facts?

THOS. F. RUMBOLD.

ON FRACTURE OF THE FEMUR. By EDWARD BORCK, M. D., Member of the Medical and Chirurgical Faculty of Maryland; Baltimore, Med. Ass.; St. Louis Med. Society; Missouri State Med. Association; Tri-State Med. Society; formerly Asst. Surgeon to West Building Hospital, etc. St. Louis: Geo. O. Rumbold. 1879. Four mo., pp. 52, fourteen illustrations. [For sale by St. Louis Book and News Co.]

This monograph, inscribed to Prof. Gregory, of this city, contains revised articles that appeared in the ST. LOUIS MEDICAL AND SURGICAL JOURNAL, and remarks by Drs. Trader, Broome and Lankford.

Prof. A. P. Lankford, p. 33, says: "Your polite invitation to describe my method of treatment of fracture of the shaft of the femur for a monograph which you are preparing upon the subject, is received. While I have nothing new in principle to offer, I yet comply with pleasure, believing that diversity of opinion amongst teachers and authors of recognized text-books upon so important a subject is alone sufficient reason for your contemplated work. And permit me to add that, in my opinion, your plan is an excellent one, making it, as it will, a true exponent of the opinion and practice of St. Louis practitioners. It will surely entitle you to the thanks of the profession."

Editorial.

THE NEW YEAR AND THE JOURNAL.

Again do we wish our readers a HAPPY NEW YEAR. One year ago we promised to exert ourselves to the utmost to maintain, and, if possible, to increase the usefulness of the JOURNAL. That we have not only maintained, but increased its usefulness, has been attested by letters from *hundreds* of our subscribers. Although the labor has been by no means light, yet it has been made pleasant by these expressions of appreciation, and by the long list of names sent us by the friends of the JOURNAL. For these we wish to return our sincere thanks. To our contributors we wish to return thanks. It is with great pleasure that we record the fact that some one or more of the original contributions from each number of the JOURNAL issued, have found their way into the foreign medical journals. We said, one year ago, and again repeat it, that the JOURNAL is ours only as to the risk and labor of conducting it; in all other respects, we hope that the profession will feel that it is theirs, and regard it as an avenue for them to the medical public and a means of individual benefit.

As our readers are aware, on last October we increased the JOURNAL to 112 pages, we now make it 128 pages to supply the demand for more space.

At the time that we undertook this work, we saw that there was room in the West and Southwest for a large medical journal. That room we determined to occupy to the full extent of our ability. We also saw that to do this to the best advantage the JOURNAL must own the office in which it was printed, or else the expense of the publication would soon be greater than the income from the subscribers. An entirely new office was then purchased, and to this stock large additions, from time to time, have been added, so that now the capacity for the amount of work to be accomplished in the JOURNAL office is practically unlimited. With these advantages, aided by a large corps of able and willing co-laborers, we are determined that the JOURNAL shall be second to none in the country.

NEW REMEDIES AND NEW PREPARATIONS.

We intend, in the next issue of the JOURNAL, to open a new department bearing the above title. This department is intended to contain questions, answers and information concerning any of the many new preparations and remedies that are presented to the profession, such as the preparations of cinchonia bark, iron, pepsin, malt, etc. This will be a very useful department if the contributions are short and to the point.

REVIEWS.

Hereafter, reviews will bear the reviewer's full name, this course being more honorable, satisfactory, and now most approved. It also removes all responsibility from the JOURNAL, which is really an avenue only to the profession, and places it where it properly belongs. Even should a review of a book be a very favorable one, a sense of modesty ought not prevent the appearance of the full name of the reviewer; and certainly a sense of manliness would dictate that the full name be appended to an adverse review.

DR. H. CHRISTOPHER.

DR. RUMBOLD:

MY DEAR FRIEND:—On your solicitation I became the Associate Editor of the JOURNAL. A distrust of my fitness for the position made me hesitate; but your partiality gave me encouragement to attempt what might fall to my lot in the association.

Having now accepted a position which necessitates my removal from the city, I deem it right and proper to place in your hands my resignation, that you may have one near you, who will aid you in your arduous enterprise. To me our more intimate relation has been very agreeable, and I realize that the friendship so long existing between us, has been firmly cemented by our mutual labors. I feel no little pride in the reflection that the JOURNAL has now a position before the public, which may well encourage you in the belief that your management has suc-

ceeded in meeting the wants and expectations of the profession, and I sincerely wish that its reputation and prosperity may continue to increase from year to year.

In severing my connection with the JOURNAL I realize how much it is I part from, and this but heightens the regret I feel in taking leave of you. That you may meet with the reward which your disinterested labors so richly merit, I sincerely wish and hope. As ever, very truly yours,

H. CHRISTOPHER, M. D.

ST. LOUIS, Aug. 1st, 1878.

It is with great reluctance and sincere regret that we sever our relation with Dr. Christopher. At the reception of his resignation we could not bring ourselves to the point of accepting it, hoping that circumstances would bring him back to the city from Independence, Mo., where he now resides. There is now no probability that he will return, as he is successfully engaged in educational work, to which he is so well suited. We are pleased to say that the readers of the JOURNAL will now and then have the opportunity of reading his ably written and highly interesting articles. May he meet with appreciative friends.

TRI-STATE AND LINTON DISTRICT MEDICAL SOCIETIES.

The manuscript of these two Societies came too late to be published in this month. Their departments will be opened in the next issue.

We invite attention to the correspondence of Professor E. Andrews, of Chicago. The subject of his letter is one that greatly interests the general profession residing in our country towns and cities, many of whose patients are inveigled into paying a large fee for a trifling operation. Without wishing to prevent any of our readers from addressing Dr. Andrews personally on this subject, we wish them to bear in mind that the pages of the JOURNAL are always an open avenue for special as well as general information.

DEATHS AND RATE OF MORTALITY

Per 1000 Inhabitants, Annually, in the Largest American and Foreign Cities, According to the Latest Returns.

CITIES.	Population.	Date of Return.	Deaths from all Causes.	Annual Death Rate per 1000	Deaths.	
					Infants under 1 Year of Age.	Persons Aged 60 Y'rs and upwards.
New York	1,096,000	5 weeks ending Nov 30	2,785	22.21	.....	.....
Philadelphia	877,500	5 " " " 30	1,439	16.95	.....	.....
Brooklyn	549,438	5 " " " 30	1,195	18.94	.....	.....
St. Louis	503,000	5 " " " 30	510	10.55	.....	.....
Chicago	460,000	5 " " " 30	669	15.16	.....	.....
Baltimore	355,000	4 " " " 30	449	16.00	.....	.....
Boston	353,000	5 " " " 30	730	20.96	.....	.....
San Francisco, Cal.	300,000	Month of November...	369	14.80	.....	.....
Cincinnati	280,000	2 weeks ending Nov 23	197	18.34	.....	.....
New Orleans	210,000	2 " " " 17	287	35 02	.....	.....
Buffalo	170,000	.....	....	.....	.....	.....
Cleveland	162,000	.....	....	.....	.....	.....
Washington, D. C.	160,000	Month of November...	332	24.43	.....	.....
Pittsburgh	145,000	" " "	210	18.37	.....	.....
Newark	126,000	.....	....	.....	.....	.....
Detroit	125,000	.....	....	.....	.....	.....
Milwaukee, Wis	123,000	.....	....	.....	.....	.....
Richmond Va	79,000	5 weeks ending Nov 6	116	15.70	.....	.....
New Haven, Conn	60,000	Month of November...	87	17.63	.....	.....
Charleston	57,000	4 weeks ending Nov 30	97	28.43	.....	.....
Memphis, Tenn	50,000	.....	....	.....	.....	.....
Mobile	40,000	.....	....	.....	.....	.....
Denver		.....	....	.....	.....	.....
Galveston		.....	....	.....	.....	.....
Indianapolis		.....	....	.....	.....	.....
Springfield, Mass.	31,500	.....	....	.....	.....	.....
Nashville, Tenn	27,000	Month of November...	40	14.76	.....	.....
Sacramento	25,000	Month of October	51	23.30	.....	.....
St. Paul, Minn	20,000	Month of November...	33	24.00	.....	.....
London	3,577,304	November 19 to 16.....	1,665	24.30	.....	.....
Paris	1,988,806	" 9 to 15.....	960	25.10	.....	.....
Berlin	1,019,626	October 27 to Nov 2....	516	25.80	.....	.....
Vienna	727,271	November 3 to 9.....	342	24.40	.....	.....
St. Petersburgh	669,741	October 27 to Nov 2...	415	32.20	.....	.....
Bombay	644,405	" 9 to 15.....	581	37.00	.....	.....
Glasgow	566,940	November 11 to 16.....	281	25.80	.....	.....
Liverpool	532,681	" 10 to 16.....	322	31.50	.....	.....
Naples	475,407	October 15 to 21.....	....	.....	.....	.....
Calcutta	429,535	September 29 to Oct 5 .	275	33.40	.....	.....
Hamburg (state)	406,104	November 3 to 9.....	....	.....	.....	.....
Birmingham	383,117	.....	....	.....	.....	.....
Brussels	175,785	November 10 to 16.....	150	20 50	.....	.....
Manchester	360,514	" 10 to 16.....	172	21.90	.....	.....
Dublin	314,666	" 10 to 16.....	187	31.00	.....	.....
Leeds	304,948	" 10 to 16	163	27.90	.....	.....
Amsterdam	302,266	" 3 to 9.....	134	23.00	.....	.....
Sheffield	289,537	" 10 to 16.....	143	25.80	.....	.....
Rome	282,214	October 13 to 19	88	15.80	.....	.....
Breslau	267,000	November 3 to 9.....	130	25.30	.....	.....
Turin	227,846	.....	....	.....	.....	.....
Edinburgh	222,371	.....	....	.....	.....	.....
Alexandria	212,034	October 27 to Nov 2....	106	28.70	.....	.....
Dresden	207,845	November 3 to 9.....	88	21.80	.....	.....
Bradford	185,088	" 10 to 16.....	88	24.80	.....	.....
Salford	170,251	" 10 to 16.....	90	27.60	.....	.....
Nottingham	165,267	.....	....	.....	.....	.....
Hull	143,139	November 10 to 16.....	67	24.40	.....	.....
Dundee	142,957	.....	....	.....	.....	.....
Portsmouth	129,461	.....	....	.....	.....	.....
Leicester	121,473	.....	....	.....	.....	.....
Oldham	107,366	November 23 to 30.....	61	29.60	.....	.....
Brighton	103,923	" 23 to 30.....	50	25.10	.....	.....

METEOROLOGICAL OBSERVATIONS.

By A. WISLIZENUS, M. D.

The following observations of daily temperature in St. Louis are made with a MAXIMUM and MINIMUM thermometer (of Green, N. Y.). The daily minimum occurs generally in the night, the maximum at p. m. The monthly mean of the daily minima and maxima added and divided by 2, gives quite a reliable mean of the monthly temperature.

THERMOMETER, FAHRENHEIT—NOVEMBER, 1878.

Day of Month	Minimum.	Maximum.	Day of Month.	Minimum.	Maximum.
1	30.5	61.5	18	38.0	56.0
2	46.0	61.0	19	43.0	52.5
3	38.0	52.0	20	38.5	57.0
4	39.0	60.0	21	42.5	50.5
5	44.0	64.0	22	36.0	55.5
6	55.0	73.5	23	35.5	58.5
7	48.0	53.0	24	40.0	51.5
8	35.0	54.0	25	37.0	45.0
9	37.0	56.5	26	36.0	44.0
10	44.0	48.5	27	33.0	42.0
11	45.0	51.5	28	36.0	47.0
12	37.0	57.5	29	33.0	50.0
13	42.5	56.0	30	36 0	51.5
14	37.5	58.0			
15	40.0	49.0			
16	46.0	50.0	Means	39.8	53.8
17	46.5	52.5	Monthly Mean	46.8	

Quantity of rain, 0.89 inches.

MORTALITY REPORT.---CITY OF ST. LOUIS.

FROM OCT. 26, 1878, TO NOV. 30, 1878, INCLUSIVE.

Yellow Fever	Cholera Infantum. 1	Hydrocephalus and	Apoplexy 7
Measles	Inanition, Want of	Tubercular Men-	Cyanosis and At-
Syphilis, Cong'al.. 4	Breast Milk, etc.27	ingitis 5	electasis 2
Scarlatina 5	Alcoholism 5	Meningitis and En-	Premature and Pre-
Pyæmia 1	Rheumatism and	cephalitis 6	ternatural Birth.. 8
Erysipelas 1	Gout 3	Direct Effect of So-	Surgical Operat'ns.
Diphtheria 29	Cancer 14	lar Heat	Deaths by Suicide.. 5
Membranous Croup20	Phthisis Pulmon..65	All Diseases of the	Deaths by Accid'nt.18
Whooping Cough.. 1	Bronchitis 9	Brain and Ner-	
Typhus Fever	Pleuritis	vous System.....48	Total Deaths from
Typhoid Fever.... 8	Septicæmia 5	Cirrhosis of Liver	all Causes.....516
Cerebro Spinal Fe. 1	Pneumonia 42	and Hepatitis .. 7	Total Zymotic Dis-
Remittent, Inter-	Heart Diseases....27	Enteritis, Gastro-	eases.....147
mittent, Typho-	Other Diseases of	Enteritis, Peri-	Total Constitution-
Malarial, Con-	Respirt'y Organs21	tonitis, and Gas-	al Diseases.....117
gestive and Sim-	Entero-Colitis 4	tritis.....14	Total Local Dis-
ple Continued	Marasmus — Tabes	Bright's Disease	eases.....200
Fevers.....20	Mesenterica and	and Nephritis ... 3	Total Develop'tal
Puerperal Disea's 4	Scrofula 30	Other Diseases of	Diseases..... 10
Diarrhœal " 15	Convulsions 24	Urinary Organs.	Deaths by Viol'ce. 24

CHAS. W. FRANCIS, *Commissioner.*

THE

SAINT LOUIS

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Journal.

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Original Contributions.

ARTICLE VIII.

SOME POINTS IN RELATION TO THE PATHOLOGY, DIAGNOSIS AND TREATMENT OF CHRONIC BRONCHITIS.* By F. H. DAVIS, M. D., of Chicago, Ill.

In this, as in all temperate climates, catarrhal bronchitis is one of the most prevalent forms of disease, frequent and repeated attacks of congestion and inflammation of the mucous lining of the air passages being the necessary and inevitable result consequent upon exposure to sudden and extreme changes of atmospheric temperature and moisture.

Whether nasal, pharyngeal, laryngeal or bronchial, these catarrhal inflammations present always the same characteristics and follow the same course. Congestion of the mucous membranes, serous sub-mucous infiltration and consequent swelling of the parts, marks the onset of a fresh, new disease, or of an acute exascerbation of a previously-established chronic affection. In the nasal tract the exceedingly vascular and rather loosely-

*A paper read before the Chicago Medical Society, January 6th, 1879.

attached Schneiderian membrane admits of rapid and extensive infiltration and swelling, resulting in a more or less complete stenosis. In the laryngeal and bronchial regions the obstructive swelling is a much less prominent feature, but a dry, spasmodic, irritative cough, expiratory dyspnœa, and the accompanying sonorous and sybilant râles are immediately developed as a result of the reflex nervous irritation communicated from the congested and inflamed mucous membrane.

After a variable period, twenty-four to forty-eight hours, or longer, the second stage, that of resolution, supervenes. The membranes disgorge themselves, and a clear, mucous discharge, changing soon to a purulent character, is poured out. The stenosis or dyspnœa is relieved, and the cough becomes looser, less violent and spasmodic in character, a coarse mucous rhoncus taking the place of the dry râles of the first stage. If the exciting cause of the attack is now withdrawn, the cough and expectorations cease spontaneously, after a few days, and the parts resume a natural and healthy condition. The continued action of irritant influences, of either a general, climatic or local character, will, however, perpetuate the local inflammation and resulting cough until a chronically thickened and hypertrophied condition of the mucous membranes result, and a morbid excitability or sensitiveness is developed in the parts, so that slight influences and impressions are capable of producing constant renewals and exascerbations of the acute inflammatory attacks. The frequency and violence of these attacks being chiefly controlled and influenced by the atmospheric conditions, vary much with the season of the year, most prevalent during the changeable, damp, chilly weather of the spring and fall, persisting to some extent throughout the winter months, and ceasing entirely with the warm weather of summer.

A permanent bronchial asthma, consequent upon obstructive thickening and hypertrophy of the mucous lining of the bronchial tubes, and an emphysematous dilation of the air cells, produced by the increased pressure thus brought to bear upon them in forced and difficult expiration, are the usual final resultant conditions following old, long-continued and neglected chronic catarrhal bronchitis.

Whether inflammatory phthisis may be developed from, and as a consequence of, catarrhal inflammation of the respiratory passages, is a question in regard to which good authorities still

hold different opinions. In my own experience during the past four years, including both dispensary and private practice, I have failed to meet with a single case of either tuberculosis or phthisis in any of their forms, giving a previous history of catarrhal disease, in which, on careful inquiry, I could not trace, independent of the local catarrh, an abundant and sufficient constitutional cause for the consumptive disease. Aside from the cases where an inherited hereditary tuberculous taint is proven, unhealthful occupations, general unsanitary surroundings, intemperate habits and constitutional syphilis are probably the most frequent constitutional causes underlying and predisposing to the development of consumptive disease. A pneumonic inflammation is set up as the result of a cold or exposure at a time when, through the operation of some one or more of these causes, the vitality is lowered, and the power of resistance of the system to diseased action is impaired. Instead of running a normal course and proceeding through the stages of resolution and reabsorption of the inflammatory exudation to recovery, a degenerative, destructive suppurative disease of the lung structure is started into activity, to terminate in fatal exhaustion and death.

This resultant condition follows, however, a pneumonic, never a bronchial inflammation. The question naturally arises next, are the subjects of chronic bronchitis any more liable than others to attacks of pneumonia, and consequently, constitutional conditions favoring to develope inflammatory phthisis? I believe not, but on the contrary the results of clinical observation and study seem to prove that a chronic sensitiveness of the mucous lining of the bronchial tubes attracts to that region, such inflammatory and congestive attacks as may threaten the air passages, and thus in a measure wards off and protects from injury the deeper-seated lung structures.

To sum up this question finally, I believe that the weight of evidence goes to show that a catarrhal inflammation occurring in an individual of healthy constitution remains from first to last, under any and all circumstances, a strictly local catarrhal disease, capable of producing no constitutional derangement or infection. In the worst, most aggravated forms of old, long standing, chronic bronchitis, dating back the commencement of their disease, perhaps twelve, fifteen or even twenty years, the appetite and digestion, general bodily nutrition, strength and vigor, will show no impairment except such as result natur-

ally from old age, hard work, exposure and poor living, of factors entering into most of these cases. In connection with the diagnosis and treatment of chronic bronchitis, it is important to bear in mind the fact that a harsh, spasmodic cough, expiratory dyspnœa and dry râles, an assemblage of physical signs and symptoms identical with those present in the first stage of catarrhal bronchitis, may be developed without the existence of any local catarrhal inflammation of the respiratory tract. A little close observation and study of these cases will usually bring to light a local inflammatory action at some point outside of the respiratory tract, from which the reflex nervous irritation is conveyed through the pneumogastrics and the various branches of the ganglionic, sympathetic nervous system. It may be a chronic grade of gastric, uterine, or hepatic inflammation; more frequently perhaps, in this climate, the results will be traceable to a subacute grade of rheumatic inflammation involving the intercostal or diaphragmatic muscles, and probably at times, also the fibrous and muscular structures of the lungs and bronchial tubes. The persistence and obstinacy with which certain cases of supposed chronic bronchitis resist all ordinary forms of treatment is almost always due to a failure on the part of the physician to distinguish their true character and pathology, as distinct from the ordinary forms of catarrhal inflammation. When a case is presented to us with the symptoms of catarrhal bronchitis in the first stage, but which has passed beyond the first week of the immediate attack without the development of mucous râles, free expectoration, etc., indicative of commencing resolution, we have almost certainly to deal with some pathological condition other than local bronchitis. Perhaps the evidence points to the stomach as the seat of local inflammation. A sense of oppression or fullness and heaviness in the region of the stomach after eating, flatulency, sour acid eructations, habitual and obstinate constipation and a thick, moist, yellowish coating upon the tongue, are among the signs and symptoms developed. There is a deficiency of gastric secretion, the nerve stimulus necessary to incite secretory action being apparently lacking. Food, when eaten, consequently remains undigested in the stomach until an acid fermentation and the resulting flatulency, sense of oppression and distress are developed. This undigested mass passed into the bowels continues to act as an excitant of reflex nervous irritation. The nerve stimulus which, by exciting

vermicular motion causes its contents to be passed along the intestinal canal, also fails to act, and the most obstinate form of constipation is the result.

Improper food; irregular meal hours; unhealthful and confined occupations; the habitual use of alcoholic stimulants, or the practice so common among the women of the lower working classes, of drinking excessively of tea, are among the causes most frequently reponsible for the origin of this form of gastric derangement.

The indications for treatment are plain: First remove, if possible, the exciting cause by attention to the habits of living of the patient; next endeavor to combine such remedies as will exert a sedative influence upon the pneumogastrics, and thus relieve the reflex nervous manifestations, and at the same time retard the fermentative change in the food until the slowly acting digestive process can have time to accomplish its function. Carbolic acid in doses of one-fifth to one-sixth of a grain, taken before eating, will fulfill, in a measure, both these indications; by its locally anæsthetic effect upon the gastric mucous membrane it controls the reflex irritability, and mingling with the food it at the same time effectually arrests the fermentative process. One of the newer class of remedies, the œnothera biennis, has proved itself an exceedingly valuable adjunct to the carbolic acid in the treatment of this class of cases; its action seeming to be that of a direct sedative to the pneumogastrics. The following is the formulæ that I am in the habit of prescribing in these cases:

℞. Acid carbolic, cryst. ..... grs. vj.
Glycerine ..... ℥ss.
Ext. œnothera bi. fl. ..... ℥iss.
Aquæ ..... ℥ij.
Sig. Teaspoonful before each meal.

In addition the following:

℞. Pil. hydrgri. ..... gr. x.
Puvl. aloes ..... grs. v.
Zinc. oxyd. ..... ℥i.
Sig. One pill to be taken at bedtime, or after breakfast and at bedtime.

In the next case that presents itself with symptoms of bronchial irritation, the evidence of gastric, as well as local catarrhal irritation, may be lacking. If symptoms indicative of uterine inflammation are present, treatment must be directed toward the relief of that pathological condition and the reflex phenomena

will be found to disappear with the subsidence of the local source of irritatio n.

If the symptoms point to a chronic or subacute grade of rheumatic inflammation as the exciting cause, some efficient antirheumatic treatment will have to be pursued in order to afford relief.

Catarrhal and rheumatic inflammation, being both affections resulting from cold and exposure, are frequently associated together. In such cases, the bronchial affection will be found to yield much more readily to ordinary treatment, if colchicum is added to such anodyne, expectorant, or alterative remedies as may be used.

In regard to the treatment of ordinary catarrhal bronchitis I have nothing especially new to suggest. Ammonia, hydrochloras in combination with some anodyne and expectorant, or antispasmodic, forms the favorite and probably the most efficient prescription, and affords sufficiently satisfactory results as regards relief to the immediate attack. The chronic sensitiveness and irritability of the mucous membranes, resulting from repeated attacks of acute inflammation, and which predispose to constant renewals of inflammatory action from the slightest exciting cause in the way of cold or exposure, can only be overcome by the most careful guarding against the action of such exciting causes.

The occupation, if unfavorable, must be changed, and the habits of life, hygienic surroundings and clothing, must be rigidly guarded and regulated. If circumstances permit, a removal for at least one fall, winter or spring, to a mild, dry, equable climate, should be advised.

If thus protected from a constant renewal of fresh irritation, in a period varying from twelve to eighteen months, the mucous membranes will regain their normal tone, vigor and power of resistance to atmospheric impressions, without any medical treatment other than what may be occasionally required to ward off or abort a threatened cold.

ARTICLE IX.

THE DIAGNOSTIC VALUE OF WESTPHAL'S PATELLAR TENDON REFLEX. By C. H. HUGHES, M. D., of St. Louis.

Diseases of the nervous system, more or less clearly discernible through the mazy multiplicity of symptoms and cloud of circumstantial neuropathic witnesses that attest their presence, have become so numerous of late years, that the practitioner eagerly welcomes every new diagnostic sign that may serve unerringly to designate a particular disorder of the nervous organism. Such a sign Prof. Westphal, of Berlin, claims to have discovered, in what he calls the leg phenomenon or absence of the patellar tendon reflex in progressive locomotor ataxia or posterior spinal sclerosis, and his statement made in the *Archiv. für Pyschiatrie*, in 1875, that "the leg phenomenon was constantly absent in the undoubted cases of tabes dorsalis" up to that time submitted for trial, has found confirmation in the recorded experience of other observers, among the latest, Dr. Thos. Buzzard, in *Brain*, for July, and in the *London Lancet*, for October, and Althaus, in the *American Journal of the Medical Sciences* in the same month; also in a late lecture of E. C. Seguin's.

The tendinous reflexion is best elicited by striking sharply with some hard substance the naked skin just below the patella, so as to affect the tendon of the quadriceps extensor femoris between the knee-cap and its point of insertion into the tibia, while the patient's leg hangs loosely from a table or is crossed at a right angle over the knee of the examining physician, (the latter being my own method,) or over the patient's opposite knee, (which is Westphals's procedure).

Other tendons, such as those of the *triceps extensor* and *tendo achillis*, respond in a similar manner.

The responsive upward jerk of the foot is not due to any effect upon the cutaneous nerves, for it takes place when the skin is rendered insensible by artificially or morbidly induced ænesthesia, provided the posterior columns are intact and is exaggerated in lateral sclerosis.

The center of the reflex action for the legs is in all probability in the lower portion of the cord. When Tschirjew, of St. Peterburg, divided the cord in guinea pigs above the entrance of the sixth lumbar nerve the phenomenon disappeared, and when he divided the posterior root of one of the sixth lumbar nerves the phenomenon failed on the side of the divided nerve; and nerves have been found in the tendon of the quadriceps extensor femoris, as well as in the triceps extensor humeri, and the tendons of other muscles.

It having been settled that no amount of cutaneous irritation will excite this reflex action, it has been concluded that the irritation of the blow is conveyed through the nerve fibres that go from the tendon to the posterior columns of the cord, thence passing to the antero-lateral columns [1] and back along the motor nerves to the muscles of the irritated tendon. The significance of this sign is readily seen. If there be complete sclerosis at or immediately above the entrance of the sixth lumbar nerves there will be no reflex response to a smart blow on the tendon patellæ, just below the patella and it is rare, for the lumbar portion of the cord not to be affected in *tabes dorsalis*, but in the commencing stage of this disease before sclerosis becomes *complete, at that part of the cord we may expect to find reflex action exaggerated*, as it is in sclerosis of the lateral columns, or not all abnormal, as in some cases of very slowly progressive descending sclerosis commencing high up in the cord. It is exaggerated in one of my own cases of twelve years' duration, now materially improved under the steady use of lacto-phosphates, arsenic, the bromide of sulphur baths and galvanism, though he can not yet stand long with closed eyes; still has atrophy of the optic discs, the ataxic gait and staggers some on turning round, and had years ago the characteristic lightning pains.

This new sign has been accepted by clever writers on diseases of the nervous system as infallible. Althaus proposes, in doubtful cases, to utilize the opposite behavior of tendinous reflexion for the purpose of differentially diagnosticating between posterior and lateral sclerosis; and Dr. Thos. Buzzard, who has written a very good book on syphilitic diseases of the nervous

1. Though the antero-lateral columns are generally described as the chief motor tracts, Woroschiloff, Ludwig and others, by careful experiments, have restricted the motor paths to the lateral columns alone, assigning to the anterior columns a function mainly commissural.

system, has such implicit confidence in this sign that he "amends a diagnosis of posterior sclerosis" after eliciting the leg phenomena of Westphal. (See *London Lancet* for October, p. 42, *et sequela*). Yet he thinks a positive answer can not be given as to the cause of the phenomenon or its absence in posterior spinal sclerosis. Nor do we, either. And Dr. Allan McLane Hamilton, who has written the best and most complete text-book in the English language, says that "reflex action is usually exaggerated."

We have not ourself found it absent in every case of tabes dorsalis, nor can we conceive why it should be in any but those forms in which the sclerosis is complete. In the earlier stages of commencing sclerosis it might even be increased, or in stages of marked improvement, as in the case we have referred to.

The careful diagnostician will not, therefore, share the enthusiasm of Dr. Westphal and his followers in regarding the absence of tendon reflex as a sure sign of sclerosis posterior, even though the gait be unaffected and the patient's delight be in mountain climbing, as Dr. Buzzard would. (See *London Lancet*, p. 443, October, 1878). Reflex action is absent in *polymyelis anterior* when the anterior cornua undergo inflammatory destruction.

For the present, therefore, we must regard it as only a symptom to be aggregated with other symptoms, which may or may not mean posterior spinal sclerosis.

I have recently found it *absent* in one healthy adult; *absent* in one adult regarded by a number of other medical men, several of them giving special attention to diseases of the nervous system, as having slight meningitis verticali; *absent* in one case of cranial fracture at parieto-temporal articulation of four years' standing, with pain in vertex, vertigo, and green-color illusions; *very pronounced* in one case of neurasthenic jerkings, diaphragmatic constricting pain, and lightning pains in spine and legs; *very slight* in one healthy man; *scarcely perceptible* in a healthy ten-year-old child; *quite perceptible* in a child with motor and vocal paralysis; *imperceptible* in a child with spinal paralysis; *very pronounced* in a case of incomplete and improving paraplegia; *normal* in two cases of cerebral hyperæmia; *moderately pronounced* in two healthy men; *only moderably perceptible* in one infant ten months old, and one child five months old; *scarcely perceptible* in one healthy child of 10 years and in one child of 4 years; *not present* in one boy of 15 years, just after recovery from general

chorea, and *absent* in one case of cerebral sclerosis and two of posterior spinal sclerosis.

Tendon reflex varies in healthy persons, just as plantar or cutaneous reflex sensibility does, though not to the same extent. Tendon reflex may be influenced by intra-cranial states, as in coma and profound congestion.

The center for the inhibition of reflex movements is in the corpora quadrigemina, and the paths for its conduction downwards are in the lateral columns of the spinal cord, while impressions pass upward along the posterior columns.[2] But even after extensive destruction of the lateral columns, as demonstrated by the researches of Schiff, Vulpean, Ludwig, Moroschiloff and others, "neither motion nor sensation," is absolutely paralyzed in any particular part, thus demonstrating a vicarious interchange of function between different parts of the cord, the central gray matter, if intact, being capable of transmitting sensory impressions.

The value of the absence of the tendon reflex phenomenon should be regarded as diagnostic, only in comparison with the degree of tendinous reflexion natural to the individual, a thing difficult to ascertain, since the phenomenon is not generally sought for in the healthy. If it were it could be found to greatly vary, though doubtless seldom entirely absent. We need not, therefore, seal the fate of those of our patients who, "though they climb mountains and walk with firm and steady step," simply fail to suddenly contract the tendon of the quadriceps extensor femoris when a sharp blow is made on the tendon patellæ below the knee; nor need we conclude there is any disease of the spine, whatever, from the absence of the phenomenon without other corroborating symptoms.

Tendon reflex varies in the same healthy persons at different times and under the influence of certain drugs, and in other morbid conditions than sclerosis posterior.

The results above stated were obtained at random from some of my office cases, during the last ten days, without any particular object of diagnostic research in view except to ascertain if, in certain states of cerebral excitation, the sign might not be exaggerated. In another paper we shall give a history of some cases.

2. We say posterior columns because the sensory tract is commonly located there, notwithstanding Ludwig and Moroschiloff place the sensory, as well as the motor tracts, in the lateral columns, more light must be shed on the subject before the limits of the motor tracts of the cord shall be precisely defined.

ARTICLE X.

ANNUAL ADDRESS BEFORE THE EVANSVILLE MEDICAL SOCIETY. By J. W. COMPTON, M. D., of Evansville, Ind.

GENTLEMEN:—There is at once presented to my mind an appropriateness on occasions of this kind, that as your retiring President I should select for the subject of this address some special features relating to the organization over which I have had the honor of presiding. Also to give in a condensed form a resumé of the labors and achievements of the Society during the past year.

To allude briefly to our individual responsibilities, duties and requirements as members of the profession of medicine, as well as members of our local medical Society, will constitute, to me at least, a pleasant part of the task. The objects of this Society as expressed in the preamble accompanying its organization, were for the promotion of professional harmony and improvement, and to exalt generally the character, usefulness and dignity of the profession. These are certainly most praiseworthy objects and should demand from each of us the time and trouble necessary to their fullest accomplishment.

The Evansville Medical Society was organized on the 6th day of January, 1845, by the adoption of a constitution and the election of officers. The first president elected was Dr. Wm. Grafton. After the expiration of his term, the following physicians have been elected in succession to preside over the Society: Drs. Dan'l S. Kane, Geo. B. Walker, L. L. Lacock, Daniel Morgan, Jno. T. Walker, Isaac Casselberry, John Conyngton, W. M. Elliot, J. G. Hatchett, A. Wulkoe, J. J. Pennington, H. G. Jones, B. J. Day, Mose Winings, Oscar Kress and J. W. Compton.

At its organization the Society consisted of eight members, including all the regular physicians then practicing medicine in this city. Sixty-eight members have been received and signed the constitution up to the present time. Of this number seven have died, and quite a number have removed from the city leaving the present membership twenty, less than one-half of the regular physicians in the city. Some of those whose names are

enrolled as members rarely encourage the Society with even their presence, and the majority of the physicians display a selfish disregard for the good of the profession and appear to take no interest in the advancement of the science of medicine.

No proper line of distinction appears to be drawn between the honorable, progressive, and the indifferent, non-progressive members of the profession, unless it be drawn by those composing a class prolific in their opposition to medical societies, medical improvement and the code of medical ethics in general, demanding that the provisions of the code be strictly applied to others, while they openly ignore entirely its wise anti-empiric and anti-humbug provisions. Medicine is pre-eminently a progressive science, and all who enjoy the opportunity of informing themselves and informing others should be imbued with the spirit of keeping the profession well up with the advance and the new development in medical science. I hold it to be the imperative duty of every practicing physician to identify himself and become a member of his local medical society, and not only to promptly and punctually attend its meetings when possible, but he should exert best his abilities to maintain the dignity and honor of the profession, to exalt its standing and to extend the bounds of usefulness. Should any of its members so far forget their obligation to the profession as to violate any of its plain provisions, it is the duty of each member to aid in an effort at securing reformation in such a professional brother, and not be found speaking behind his back. It not unfrequently happens that if the charge is properly investigated it would be discovered to be founded on rumor and misunderstanding—as groundless and unreal as the "baseless fabric of a vision."

The profession of medicine should possess more candor, more honor and more brotherly love than is often found among those who live near enough to be neighbors.

A pure and high standard of character and conduct is a concomitant necessary to the usefulness and efficiency of a medical man. Quackery should be condemned as a fraud on human rights.

Our mutual improvement may be readily secured by having all of the members of the profession become contributing members of their local medical societies; so important is this question that in many of the State medical societies, a physician can not obtain a membership upon application, unless he is a mem-

ber of the local society nearest him or promises to become a member at the next succeeding meeting. It is needless for me to enter into any line of special argument on this subject to convince anyone of the importance of every regular medical man becoming identified with the local medical society.

Recurring to the organization and achievements of our own medical society, it will be proper to state that one year after its organization by an act of the legislature, approved January 19, 1846, it was incorporated with all ordinary power of corporate bodies and with the additional power of establishing a school of medicine and surgery, to grant diplomas and confer degrees in medicine. Besides the permanent benefit and the general improvement of each member arising from the discussions in the meetings, which have been held monthly for thirty-four years, the Society has established a medical college that has held thirteen annual sessions. Its graduates now number over one hundred. While referring to its charitable labors it may with just pride point to its free daily dispensary where thousands of indigent sick receive gratuitous medical and surgical treatment. These institutions, the legitimate offspring of the Evansville Medical Society, are in a satisfactory and flourishing condition. A praiseworthy liberality on the part of our citizens have placed both the college and dispensary on a good financial basis, so that they now fully meet the requirements of the increased growth in population and not only add to the attraction and wealth, but have become cherished institutions of our beautiful city.

During the past year some of the meetings have been unusually large. The June meeting was one of particular interest, the subjects discussed, sub-fœtation and rheumatism, being of such practical medical importance, as to be reported for publication. They were published in the *St. Louis Medical and Surgical Journal* and copied from that journal as a whole in other medical journals. These were the first proceedings of this Society ever reported for publication, and the flattering reception which was accorded to them should encourage us to more frequently have our practical discussions published, so that the profession generally may share the benefit of whatever is in them that is practical or useful. Being a warm advocate of medical societies, I do not believe that I over-estimate the large amount of profitable information that may be disseminated by the members of the profession as they assemble from various parts of the country.

In a city like ours the assembling of the fraternity in the capacity of a medical society, imbued with the desire for the promotion and advancement of medical knowledge, and of fraternal good will, cannot fail to be productive of lasting benefits. Those of acknowledged abilities, can by reason of their well-trained intellects and their ripe professional experience, impart to others information which may solve problems previously enshrouded in doubt, and may overcome difficulties that associated effort alone could surmount. This organized co-operative effort, this habitual intercourse is indispensable if we would keep the great body of the profession well up with the rapid advance that medical science is now making in the several branches of medicine, and enable us to respond intelligently to the new and increased demands of an educated public.

Whilst the knowledge of everything contained in the science of medicine is greatly to be desired, yet it is not to be expected that all physicians can acquire this degree of perfection. The vast accumulation of new truths, the new discoveries, in fact, the aggregate of all that this advanced age comprehends under the name of medical science, is the combined wisdom of many and not of one mind. All physicians may have attempted to study and to thoroughly acquaint themselves with all the intricacies of the science and art of medicine. But it will be readily acknowledged that some men possess greater aptitude and skill, with favorable opportunities which enable them to acquire greater proficiency in some particular branch of a profession than is possible for others to do. A number of men may be equally accomplished as anatomists, physiologists and chemists, yet one may possess peculiar and superior opportunities and thereby become a skilled surgeon; a second, having the fitness, becomes a superior gynæcologist; a third becomes a skilled therapeutist; a fourth *par excellence* in diagnosis, while yet another becomes more proficient in the treatment of diseases of the eye. Bring these brilliant lights together in the capacity of members or delegates to a medical society, and each one will be able to teach all the others practical truths in reference to what he himself best understands. He may not be able to present anything new, but he will be able to express his knowledge so forcibly, so clearly, that others will be able to comprehend distinctly what had previously been but partially understood. This organized coöperative effort can become instrumental in greatly increasing the

accumulation of a vast store of useful knowledge. My hope is that we will in this way increase our knowledge of medicine.

I now beg that you will accept my very best thanks for the honor you were pleased to confer on me one year ago, and for the courtesy and consideration which characterized your deportment toward me during all the time intervening between my election and the closing of my term of office.

Reports on the Recent Progress of Medicine.

ARTICLE XI.

THE SPIRIT OF THE EUROPEAN MEDICAL PRESS.

By A. C. BERNAYS, A. M., M. D., Heidelberg; M. R. C. S., Eng.; Member of the German Society of Surgeons, Berlin, Etc.

A lecture held by Prof. Dr. von Nussbaum before the Medical Society of the Circuit of Munich, December 20th, 1878, is the most important novelty which has come to our notice (by special favor of the author) during the past month. We therefore put the essence of it at the head of this article, believing it to be of vast practical importance to all surgeons. The article is modestly headed "The Operation of an Intercostal Neuralgia." In the introduction the author tells us how the operation of nerve-stretching originated with him. He gives us the history of its discovery. It was discovered by accident. He then shows that one may practice nerve-stretching, without giving up rationalism, by stating that a strong traction on a nerve trunk must sever it entirely from its connections, must cause a separation of the nerve-marrow from its coating, and must bring on new ways and means of nutrition, since the ecchymoses and extravasations of blood in the perineurium extend a long ways upwards and downwards. After the publication of his first successes, many surgeons, but especially himself, have operated with brilliant results

in cases of severe tonic and clonic spasms, bad cases of writer's spasm, painful diseases of all descriptions, many cases of reflex epilepsy. He never once saw paralysis or any deterioration of symptoms. Even the very tender and small facial nerve was stretched with elegant success in a case of tic convulsif by Dr. Baum, of Danzig. All these cases had been treated by all manner of means, viz., morphine, atropin, arsenic, galvanism, myotomy, tenotomy, nitrate of silver, ergot, etc., but all in vain. There is this most important feature about the operation, and that is that we are entirely safe against any return of the disease, which is the rule in neurotomy and neurectomy, although these are much more severe and dangerous operations. This point seems to us to be of the utmost practical value, and, if true, the operation of stretching will undoubtedly supercede our well-known resections and excisions of nerves which we are now practicing in cases of neuralgia. We humbly and respectfully take the liberty of expressing some slight doubt, as yet, in regard to the immunity against returns which our learned author claims for his operation, on the ground that his experience is too limited as yet, and that the time which has elapsed since his first operation might be considered too short. (The first operation was performed in 1871; only within the last three years has the operation become very popular.) At the same time, we sincerely hope that our doubt may prove to be without foundation, because then we can be more at ease and speak with certainty when advising our distressed neuralgic patients. V. Nussbaum makes another important and correct suggestion when speaking of his operation as a means of cure for cases where the nervous centers are the seat of disease. He reasons as follows: "It is a fact that a small splinter under a finger nail can cause fatal tetanus. It is a fact that a small scar over the achilles tendon caused epilepsy for many years, each attack being accompanied by loss of consciousness and clonic spasms of the entire body. Some years ago a young man complained to me that he was subject to epilepsy, saying that he always has a severe access when his left eye becomes slightly reddened. I noticed a black foreign body in his cornea about the size of the extreme point of a sewing needle, which was encapsulated and would cause an irritation of the eye from time to time that brought on an epileptic access. I persuaded the young man to have it taken out, and after I had removed it there never was another epileptic attack.

The black speck proved to be the point of the hard wing of a beetle. Now, if such minute peripheric lesions may cause a general disease and even death in tetanus, why may not a beneficial peripheric influence bring on a favorable effect upon the nervous centers or upon the general condition of the body? When we wish to reach any locality, we naturally seek the nearest way. Suppose we had a certain lesion in the spinal marrow. How can we reach the place of disease in order to act upon it by the most direct course? Finally, I ask, is it not more plausible and natural if we make use of those nerve trunks as our means of treatment which show distinct signs of disease than to pour medicines into the stomach, the relation of which to the central disease we are at a loss to explain? I am positive that the nerve trunks lead to the diseased centers, but what becomes of the medicines put into the stomach? What directions they take and how they may act upon the cord is certainly not more naturally or easily to be explained."

[The case of intercostal neuralgia, which is ably reported at length by Dr. Lutz on page 103 of this number, needs no further commentary.]

The spirit of this paper, as we saw, was decidedly in a progressive direction. We gladly take this opportunity of expressing our opinion of what the progress in practical medicine amounts to in our time. Let us take some examples of great progress achieved by modern medical men. Marion Sims, who is justly regarded the greatest and most productive of American surgeons, bases his European reputation entirely on the fact of his having made diseases of women accessible to local and surgical treatment. Before Sims they were almost exclusively treated by means of prescriptions (sic!) Now, after him, we treat them locally upon the rational basis of a diagnosis achieved by surgical means, viz.: the speculum, the sound, etc. Gustave Simon, my former preceptor and friend, of Heidelberg, was one of Sims' most ardent admirers, and followed his teachings in many cases, oftentimes introducing original modifications or improvements. He was the one that first freed from the old-fogy internal medicine (might properly be called infernal medicine) the treatment of many kidney diseases (nephrolithiasis, hydronephrosis, etc.,) in his brilliant and last work, "The Surgery of the Kidneys," begun in 1871 and finished in 1877. Thus, also, we know that the diseases of the rectum and of the urethra have almost en-

tirely been taken out of the hands of the physician and delivered into the more beneficent hands of the surgeon.

The above paper by von Nussbaum again encroaches on the province of the physician and turns over a large number of hitherto incurable diseases into the always-ready hands of the surgeon for a permanent cure. I might continue citing examples of this kind indefinitely, but these suffice to prove the direction that has been taken by the progressive portion of our art and science. I do not wish to be understood as underrating the high and noble mission of the family physician. I know that his influence, in the long run, naturally must prove more beneficial to mankind than our own services, which are always only limited to a single individual; and it is the height of our wishes that every family who may request our services in future be under the regular care of an educated and refined family physician. The perverse state of affairs in England, where the surgeon is looked upon, in most cases, as merely the tool of the physician, we hope may never intrude upon this country. But we earnestly wish that the disastrous fashion which is now too very common in this country, namely, that a single person undertakes to conduct a surgical, obstetrical and a family practice, be abandoned, at least in the larger cities. A division of labor, as proposed here, would correspond to the requirements of the profession from a scientific point of view, considering the welfare of the afflicted.

A NEW METHOD OF STERILIZATION OF WOMEN.—(Dr. S. Kochs, Adjunct for Gynæcology and Obstetrics at Rome. *Centralblatt für Gynæcolgie*, No. 26.) "There is a large number of cases, where sterility of women seems desirable, cases where the act of child-birth gives great fear of pernicious consequences. I will only refer to absolute narrowness of the pelvis, affections of the lungs and kidneys, and psychoses. In order to achieve the result I have lately invented and tried an operation which I will call "*sterilization*" in the case of a lady suffering from a chronic disease of the lungs. Since the object of operation is to cause permanent and certain sterility, it may be thought rather hazardous and it may be claimed that we have means and ways of preventing conception or eventually bringing on an abortion. Concerning the latter means, we think that is not always without danger, especially where the operator is compelled repeatedly to cause

the death of fœtus, while the different ways of preventing conception do injury to conjugal harmony and are deleterious to the nervous system of both parties. Therefore the operation is always indicated where permanent sterility is necessary *for the prevention of processes that threaten life.*"

The operation is simple: it consists in bringing about an obliteration of the uterine orifices of the Fallopian tubes, thereby preventing the egg from entering the womb or the sperm from entering the tubes as the case may be. The author proposes to effect this end by means of attaching a galvanic battery to a uterine probe and of causing obliteration by means of cautery. For an accurate description of the instruments the author refers us to his exhaustive monograph, which is not yet published. It is not known that the operation will achieve the desired end with certainty. The operation mentioned above was performed Oct. 31st, six days before menstruation was due; it was only followed by a slight uterine colic; menstruation set in on Nov. 10th, and was but very slight. It seems to us that this operation is one of great importance and will doubtless bear beneficial fruits. One of its best features is that it will never become the property of quacks, but will require the skill and science of an educated surgeon to be performed properly and without danger. Absolute certainty as to the effects of the operation can only be gained from post mortem experiences, since even subsequent sterility may have other causes.

[Below we append a list of new books from the European book market. We propose to furnish a list of this kind regularly for the benefit of our colleagues who may not be able to hear of new publications as early might be desired. When ordering books, always give full title and place of publication, with date, and affix the price. Any bookseller can then readily procure the desired volume.]

ENGLISH BOOKS.—NOVEMBER, 1878.

Annadale, Th. Abstracts of Surgical Principles. 12 mo. (Maclachlan, Edinburgh.) Price, $1.

Dinnmann, Th. A Glossary of Biological, Anatomical and Physiological Terms. Octavo. (Griffith & Farman, London.) Price, 75 cents.

Stimpson, L. A. Manual of Operative Surgery. Illust. Octavo. (Lewis & Co., London.) Price, $2.75.

St. Thomas' Hospital Reports. Vol. 8. (Churchill, London.) Price, $2.00.

GERMAN BOOKS.—NOVEMBER, 1878.

Archives for Clinical Surgery. Edited by Langenbeck & Billroth. 23rd Vol. 1st No., Plate and Woodcuts. Large octavo. (Berlin, Hirschwald.) About $10.00 per year. Is generally considered the best surgical journal in the world.

Bergmann, E. Treatment of Gunshot Wounds of the Knee-joint in Military Practice. (Vienna, Hölder & Co.) Price, 75 cents.

Eichhorst, H. The Trophic Relations of the Pneumogastric Nerve to the Muscles of the Heart. Price, 50 cents.

Falkson, Rob. On the Development of Tooth-sac and of Cysts in the Jaw-bone. (Königsberg, Beyer.) Price, 25 cents.

Guckeisen, Aug. The Newest Laws of Nutrition, after v. Pettenkofer & Voit. Three Lectures. (Dumont Schauberg, Cologne) Price, 50 cents.

v. Ihering, H. The Peripheric Nerves of Vertebrates. Five Plates and Thirty-six Woodcuts. Large quarto. (Leipzig, Vogel.) Price, $5.00.

Keppler, Fr. Acute Saponin Poisoning and the Value of Saponin as a Local Anæsthetic. (Berlin, Hirschwald.) Price 25 cents.

Klebs. E. On Cellular Pathology and Infectious Diseases. Lecture. Octavo. (Prague, Dominicus.) Price, 20 cents.

Löwe, Ludwig. On Anatomy of Cavity of Nose and Mouth. Seven Plates, Charts. (Denicke, Berlin.) Price, $3.00.

Orth, John. Compendium of Pathological-Anatomical Diagnosis. Finds Practical Rules for Conducting Obductions. Second Improved and Enlarged Edition. (Berlin, Hirschwald.) Price, $2.50.

FRENCH BOOKS.

Guerin, A. Clinical Lessons on Diseases of Genital Organs of Women. Twenty-two Figures and two Plates in chromo. (Paris, Delahaye.) Price, 2.00.

Picard, H. Treatise on Diseases of the Bladder and Calculous Affections, with figures. (Paris, Balliere et fils.) Price, $1.60.

ARTICLE XII.

SURGERY (FROM THE GERMAN).

By F. J. LUTZ, M. D.

Since Prof. Nussbaum, of Munich, first called the attention of surgeons to nerve-stretching in 1860, as a means of treating certain painful and spasmodic nervous affections, numerous operators have chronicled their experience with this method in cases of neuralgia, tonic and clonic spasms, writer's-cramp, epilepsy, tetanus, etc. The latest contribution to this subject is one from Dr. Nussbaum, himself.

The patient had been suffering with intercostal neuralgia for twenty years. Every imaginable remedy had been tried; various kinds of baths, metals, narcotics, electricity, moxæ, etc., but all in vain. Sometimes there was an interval between the attacks; then again they would last for months, and of late they increased continually, several paroxysms occurring during the day. Strong injections of morphia gave only temporary relief. No cause could be discovered for the neuralgia. Pressure over the region involved would increase the pain during paroxysm, but it could not be produced in that way.

The site of the pain is the epigastric region, between the ensiform cartilage and the umbilicus. Around the whole body the patient experiences a spasmodic constriction, which assumes the shape of a firm pressure at the vertebræ and of intense pain in the abdominal muscles. The most painful spots are a hand's breadth from the linea alba, just midway between the sternum and the umbilicus on both sides.

Such extreme pain did the man suffer, that although it was represented to him that the operation had never been performed and that a cure could not with certainty be promised, he willingly consented, yea, even urged its performance.

Nothing need be said about the difficulty of dissecting out the abdominal terminal branches of the eighth, ninth and tenth intercostal nerves. The problem to be solved was, to find a spot where the nerves could be exposed without dangerous laceration and grasped with the fingers. After repeated experiments

on the cadaver, it was found that most eligible wounds would be those made parallel to the axis of the body, between the sternum and umbilicus, about a hand's breadth from the outer border of the rectus abdominis muscle, for just there the nerves in question emerge from the muscles and give off their branches.

The operation was conducted under Lister's spray. On the left side the nerves were found and stretched without any mishap, but whilst those of the side were stretched, a knuckle of peritoneum protruded, and, in the attempt to replace it, a slight rent was produced, which was sewed up with catgut. The wounds were dressed antiseptically, and were so entirely healed after twenty-five days that the patient was discharged free from his neuralgic pains. The operation was performed on the 6th of November, 1878 and up to December 20th he has not had a relapse.

Translations from the German.

GLAUCOMA—Continued. Excerpts from a Lecture by L. WECKER. [Translated by WM. DICKINSON, M. D., of St. Louis, from *Klinische Monatsblätter für Augenheilkunde* for May, 1878.]

Our author inquires, "In what region must we seek for the irritation of the nerves adequate to produce the hyper-secretion?" If extension of isolated nerves into the interior of the eye could be demonstrated, perhaps in this question of secretion (vessel filtration) it could be easily determined from whence the so-called secretion nerves proceed, whether from the sympathetic or from the trigeminus nerve.

Though often controverted, the theory is receiving general acceptation, that the trigeminus must be regarded as the vessel dilator, the sympathetic as the vessel contractor (v. Hippel. Grünhagen). It must, however, certainly be admitted that only *active* dilatation, through irritation of the filaments of the trigeminus, can induce a glaucomatous increase of pressure, while the *passive*, through paralysis of the fibers of the sympathetic, can not pro-

duce a like effect; and yet glaucoma is sometimes consequent upon the clinical use of atropia.

But even by increase of pressure in consequence of irritation of the trigeminus (and it can not be doubted that in some manner or other it does stimulate to an increase of the fluid contents of the globe), the "infected circle" can not be established through which the secretion once increased, affords occasion for a new hyper-secretion; in other words, it is incapable of superinducing the irritative symptoms of true glaucoma.

To this it can be replied that, since experiments made on animals can not be sufficiently long-continued without inducing exhaustion of nerve power, yet clinical observation furnishes us with abundant proof that irritation (e. g.), neuralgia of the trigeminus, can provoke an increase of intra-ocular pressure and glaucoma.

In an eye affected with senile changes, periorbital neuralgias are the occasion of a considerable diminution of the extent of filtration; and while they redden the eye, they are effectual in provoking a glaucomatous attack. Nor can it be doubted that strong moral emotions are sometimes followed by a like effect.

How does irritation of the nerves in the interior of the eye, in consequence of the pressure of a foreign body, occasion an increase of function of the so-called secretion nerves? What does clinical experience teach us? That the presence of a particular foreign body, situated in the self-same region, thrust in through the same kind of a wound, produces entirely different effects, whether it has entered the eye of a young or old person. Only in the latter class of persons will indications exist that the symptoms of irritation are assuming a glaucomatous character. We therefore see that the irritation and congestion occasioned by a foreign body induces this affection only with compression and partial obstruction of the filtration passages in an eye already predisposed to glaucoma.

By way of historic episode unworthy of the high reputation of our author, he devotes a page to an abortive attempt to despoil Prof. A. V. Græfe of the honor universally accredited to him of the discovery of the surgical value of iridectomy in the treatment of glaucoma, and also to place on record sentiments derogatory to the fair fame of the modest and peerless ophthalmic surgeon. This discovery, however, in the following pages, he is perforce compelled, indirectly, to award to him. Though regard-

ing this operation as the most effectual mode of treating glaucoma, yet he entertains the strong conviction that a more simple and more philosophical mode of treatment will be substituted for it. "Ten years after the eventful discovery of v. Græfe, I published the opinion that excision of the iris was not, *per se*, the important element in this operation for glaucoma, but that this was premised in order to be assured that a broad aperture could be made in the corneo-scleral border without danger of compression of the iris.

By the removal of a broad piece of the iris, we occasion an unnecessary mutilation, as I have endeavored to convince practitioners, as in the case of performance of another operation, viz., cataract extraction. In this operation, gentlemen, you have often seen me, contrary to my expressed principles, remove a portion of the iris, but, as I have now for ten years averred, in order to secure a clean and advantageous wound for filtration. This consideration is the more important, as it concerns the cure of the complicated traumatism occasioned by cataract extraction. According to this view, excision of the iris is only for the purpose of securing an unobstructed wound, especially at the insertion of the iris. In respect to this question, I am enabled to affirm that I meet with but few competent colleagues who do not concur in my opinion, and who have not, without hesitation, abandoned the ideas formerly entertained.

What, then, is the *modus operandi* of iridectomy in the treatment of glaucoma? Undoubtedly in consequence of the section made. The number of cures effected by simple sclerotomy is now so considerable that abundant proof is obtained of its value. But the results, also, at the same time demonstrate the incorrectness of the explanation given by Ad. Weber of the action of iridectomy in glaucoma, who thinks that the *pulling* of the iris during the operation separates this membrane from Fontana's space, or that this separation is produced by the intrusion of the aqueous humor between the iris and the cornea. We must, however, insist that, while cases occur in which adhesion of the iris at the iris angle is the occasion of glaucoma, which, according to the explanation of Ad. Weber, takes place in simple glaucoma, undoubtedly in most cases the iris angle is entirely free.

Without mentioning the re-establishment of filtration by means of the cicatrix, we may allude to another curative influence of the section proposed. It being assumed that Schlemm's

canal is a lymph space into which blood from the veins is prevented from flowing by a system of valves not well understood (though under extraordinary circumstances this canal may be found filled with blood, as reported and sketched by Prof. Schmidt); it being assumed, I say, that this wide lymph space, situated in the trabecular peri-corneal tissue, is, on the one side, in connection with the lymph canals of the cornea, the sclera and the chambers, and on the other with the veins, yet it cannot excite surprise that a connection between them can be brought about in a more direct manner by means of the section proposed.

The theory of Exner, which assumes that by excision of the iris the cure of glaucoma is accomplished; that a direct connection of the arteries and veins of the iris is established; that the arterial blood after the excision of a portion of the skin is poured immediately into the venous blood current, is consequently founded upon the scleral section, and furnishes the explanation how this section alone is effectual in an undoubted number of cases. Prof. Waldeyer, to whom I propounded this question, whether to him as an anatomist such an explanation appeared tenable, replied in the following manner, viz: "That question, in my opinion, cannot be answered from a purely anatomical standpoint. Should an incision be made at a given point, there would certainly be opened a number of veins, lymph spaces, capillaries and arteries. What then happens? For a moment the blood will flow into the lymph spaces, or vice versa, the lymph into the blood spaces, according to the relations of the pressure. But this does not long continue; the wound reaction will generally induce closure of the vessels thus opened. The possibility that later a more direct communication existing between the lymph avenues and blood avenues is established—the vessels becoming pervious, the thrombi absorbed—is neither confirmed nor especially disproved by anatomy."

We have now proven that glaucoma is induced in consequence of an impediment to normal filtration; that operation, in order to be effectual, must be instituted at the origin of the principal filtration spaces, the spaces demonstrated by Leber, that this operation in a peculiar manner restores the filtration, and that the equilibrium between the secretion and excretion is thereby restored. And in addition, it seems to me proved that excision of the iris, per se, plays no part in the benefit of the operation. But it remains to be determined whether the res-

toration of the equilibrium through the mediation of filtration is secured in such manner that the fluids are emptied directly outwards through the section (filtration cicatrix) or into the venous circulation or immediately in some way or other.

Patients themselves make us acquainted with the peculiar manner in which iridectomy operates. Many years ago I operated upon a young officer, formerly a pupil in the Polytechnic School, for glaucoma, consequent upon perforation of the cornea of the left eye. A very broad pupil superiorly was made so as to separate the iris from the cornea as much as possible. By this means I succeeded in preserving a portion of his vision and in arresting immediately the glaucomatous symptoms, and also in securing the absorption of the leucoma. The wound healed with a weak cystoid cicatrix. One day, as I met my patient and inquired how he was pleased with the eye operated upon, without having the least intimation respecting the modus operandi of iridectomy, he replied, "From time to time, I experience still in my forehead a sense of weight, especially if I undertake any laborious effort; it then appears to me that my eye becomes harder; but I have now discovered a means of quickly freeing myself of this unpleasant sensation. With the eye-lid I make a pressure upon my eye, and, as I have convinced myself before a glass, by this means I press a certain amount of fluid beneath the conjunctiva, which consequently becomes elevated. When this has been accomplished, instantly I feel my eye free." The patient then in my presence repeated the experiment and I perfectly convinced myself of the correctness of his statement.

With the design of introducing a surgical procedure for the cure of this confessedly intractable affection, which shall, according to the views of our author, be more philosophical, more effectual and involving less mutilation and hazard, he has proposed simply a peripheral section of the sclera, "subcutaneously from the anterior chamber in the corneo-scleral border."

A description of the mode of operation, and of the instruments by which it is performed must be deferred till the next number.

GENERAL THERAPEUTICS IN OPHTHALMOLOGY. By PROF. A. NAGEL. [Translated from *Jahresbericht ueber die Leistungen und Fortchritte, in Gebieste der Ophthalmologie*, by S. POLLAK, M. D., Surgeon to the Eye and Ear Infirmary of the St. Louis Hospital.]

The physiological effect of Hyoscyamin has been tried by Simonovitch ("Ueber Hyoscyamin und dessen Badeutung fur die *Augenheilkunde*" *Archiv. fur Augen*, iv). Therapeutical experiments have also been made by Prof. Dor, in his clinic. Pure hyoscyamin produced no kind of effect on the pupil; the brown extract of hyoscyamus was substituted for this. Most favorable results were attained in two days in parenchymatous keratitis. The condition of the eye had remained unchanged for many weeks, although other remedies had been used. Considerable benefit has been derived from hyoscyamin in many cases of chronic iritis, which had resisted the use of atropin.

Carrera Arago (Amaurose complete transitoire, consecutive a l'action de l'atropine et de la Calabrine," Ann. d'ocul) mentions a case of mydriasis from atropin, in which Calabrine had been applied. Rapid restoration of accommodation ensued, but this was followed by total blindness. The child complained also of headache and deafness. After vigorous revulsive treatment, sight returned partially in twenty-four hours, but only to wane again until after six days, when there was a complete and permanent restoration of the sight. These phenomena are attributed to the effect of both remedies.

Duquesnel ("Sur la matiere colorante rouge derive de l' eserine. Bull. gen. de therap.), observed that Eserin precipitated by an excess of alkali is at first white, but on exposure to the air becomes red, then yellow, then green and lastly blue. This red product of oxidization, rubereserine can be isolated and crystalized by chloroform. It is physiologically negative; possesses not the myotic properties of the calabar bean. The colored solution of eserin should never be used. The neutral sulphate of eserin is very soluble; it can be easily preserved dry, and is highly myotic.

Kämmerer ("Ueber die Wirkungsweise der Calomel-Einstäubungen in das Auge," *Virchow's Archiv.*) found mercury in the urine of patients who had calomel dusted persistently in their eyes. It cannot be doubted that the calomel is partially sublimated in the conjunctival sac, and as such is absorbed.

The same distinguished chemist made an observation on himself. He suffered from anterior synechia and from opacities of the cornea, which caused nearly total loss of sight. The latter had resisted the strongest solution of atropine for eighteen months. He then instilled a moderately strong solution of iodide of potass. The fresh solution caused no great irritation immediately, but after four or five hours most violent pains set in. Kämmerer supposed that the hydroiodic acid which was set free by decomposition, might be the cause of the pain. He tried to prevent the freeing of the acid by the addition of bi-carbonate of soda; the best possible result was attained; not only did the opacity become gradually thinner, more transparent, but the synechia also gave way, the pupil became again movable and normal.

In consequence of this experience, Kämmerer recommends a solution of 2 grammes of iodide of potassa, 1 gramme of bi-carbonate of soda, water 40 grammes, to which iodine may be gradually added, until the solution becomes quite red. This solution will change on exposure to light. The quantity should be no more than required for eight days.

In reference the effect of Strychnia upon the eye, it is worthy of mention that Falck in his toxicological studies, *Vierteljahrrschrift f. gerichtl Medicin*, vol. xxi,) found as a premonitory symptom of poisoning by strychnia, hyperæsthesia of the retina. Animals become photophobic and seek dark places.

Acker ("Ueber Lahmung nach Diphtherie and uber Subcutane Strychnin Injection," *Arch. Klin. Med.* Vol. xii) reports the results reached with hypodermic injections of Strychnia in cases of paralysis, the sequel of diphtheria. They were, in the main, very favorable, though not exclusively due to strychnia, for galvanism had been used at the same time.

This essay, however, chiefly aims to mention the dose and the effect of strychnia injection. The single dose was 0.01 of a gramme of strychnia nitras, the solution 2 per cent. In one case there were injected in one month 0.46 of a gramme; in another,

in nineteen weeks, almost 4 grammes. The dose of 0.01 of a gramme, twice daily injected, produced no toxic effect. A dose of 0.02 of a gramme produced, the first day, no toxic symptoms, but the same dose, repeated the second day, caused considerable toxæmia, such as trismus, trembling, tetanoid stretching of the limbs, but which subsided without antidotes, leaving only a little prostration behind. *A cumulative effect had never been perceived.*

He mentions the brilliant achievement of R. Barnwell, in 1870, with large doses of strychnia in a concentrated solution, in several cases of paralysis, in which the treatment with electricity had remained fruitless, among which were many young children. With a child of 9 months, $\frac{1}{14}$ grain=0.0042 of a gramme was used daily for some time. This was well borne, while $\frac{1}{8}$ grain caused only slight toxæmia. Barnwell lays great stress upon local application in local affection. By a small absorbing surface, small quantity of injecting fluid, but a strong concentrated solution, he expects to retard its absorption in the blood, and thus to prolong its local effect.

Heiberg (Massage ved Œjensyzdomme) found that Massage or Shampooing of the cornea (?) very useful in facettes and corneal opacities. In the latter, sight had improved from $\frac{20}{200}$ to $\frac{20}{50}$. The treatment lasted several months.

Gastaldo (Du Seton Keratique, Geniv medico Quirurgico, Ann. d' Oculistique) recommends a Corneal Seton made of one or two horsehairs, covered with some irritating unguent, to be drawn with a needle through an opaque cornea, to bring about a resorption of an interstitial deposit (!).

He suggests the same method, likewise, in chronic glaucoma, in order to establish a permanent escape of the aqueous humor, and also in several other diseases of the eye, as a means to convey remedies into the interior of the eye, such as strychnine, brucine, eserin, phosphorus, and, lastly, with a view to induce suppurative inflammation and gradual shrinking of the bulb.

Beard ("Medical and Surgical Cases Treated by Electricity") reports, among many other electro-therapeutic achievements, a case of asthenopia with a young woman which had been entirely relieved by galvanism.

Rockwell ("The Relation of Electricity to the Pain of Herpes Zoster," *Phila. Med. Times,*) comes to conclusions about the treat-

ment of Herpes Zoster with violent neuralgia: that in zoster of the head the *galvanic*, and in zoster of the trunk and extremities the *faradic* current predominates, and is exclusively operative.

Soetlin (Zur Therapie des Nystagmus mittelst des Constanten Stroms) effected cures in two cases of acquired nystagmus with the continuous current. The cathode was placed upon the closed lids, the anode behind the ear, and a current from seven elements was kept up for one and one-half minutes.

Nieden ("Ueber Nystagmus als Folgezustand der Hemralopie," *Berlin Klin. Wachenschrift*), who usually relieved mild cases of hemeralopy with nystagmus by glasses, tonics, strychnine, found all these remedies inoperative in a case where nystagmus had lasted fourteen years, but attained the desired result by the application of the constant current for ten weeks. The kathode was applied to the temple, the anode to the mastoid process. The current came from eight to twelve elements, kept up one minute.

Clinical Reports from Private Practice.

[The readers of the JOURNAL, especially those who reside in the country, should bear in mind our wish that this department BE KEPT FULL. Long histories of cases are not wanted, as they will crowd out other reports. Short, concisely written reports are wanted.]

MALIGNANT PUSTULE. By E. A. VOGT, M. D., of St. Louis, Mo.

I was called to see G. St——, a young man 17 years of age, on Tuesday, March 6th, 1878, apparently suffering from erysipelas. I found him in a very high fever; temperature, 104°; pulse, 130; his eyelids were closed and œdematous, looking like bladders; the lips, cheeks and scalp, as well as neck, were enormously swollen or puffed up; his breathing and deglutition was much embarrassed.

The history as given at that time, showed that he had hurt his eye by falling from a milk wagon; this happened on the previous Saturday.

TUESDAY A. M.—Finding his eyelid blackened and swollen, he

went to a barber, who applied a few leeches to it; after that the pain, fever and swelling set in. Ordered

Sulph. of mag.....℥iss.
Chin. sulph.....grs. xv.
Acid sulph. diluted.....℥ij
Aq. and syr. simp. aa.....℥iij.
Sig. Every two hours a tablespoonful.

Also gave

Calomel.....grs. iv.
Dover's powders.....℈ss.
M. f. p. Sig. To be given at night.

WEDNESDAY.—Continued medicine; collodium was applied to the swollen face and ice to the head.

THURSDAY P. M.—The patient acted like a maniac, so much so that nobody could manage him; the swelling had so increased that his face did not resemble a human being, but was a shapeless mass. Dr. Hall was called in for consultation; he was not satisfied with the history given; inquired whether or not if the young man had handled diseased animals, but this was strongly denied; so he gave it as his opinion that this was not a case of simple erysipelas, but that blood poisoning must be the cause of it.

He ordered bromide of potassium in ten grain doses, every hour; also quinine in two grain doses dissolved in diluted sulphuric acid; cranberry poultice was applied to the face and hot foot-baths were ordered.

FRIDAY.—Patient little easier; the bromide of potass. continued, alternately with five grain doses of sulph. carbolate of sodium in a mixture. The same treatment was continued on Saturday.

SUNDAY.—Swelling begins to fall; patient sleeps well; bromide omitted; a solution of permanganate of potassi. applied to the eyelids, which looked black; could not be opened; quin. ferro-citri in one grain doses, internally.

Eight days later I had another consultation with Dr. Hall. The ulcer around the eye was gangrenous, and, nothwithstanding the repeated washings every hour with solutions of permangonate of potass. with chlorinated sodium, carbolized glycerine and chloral hydrat was tried in succession the ulceration had destroyed nearly every particle of the muscles of the orbit, so that the eye was laid bare as if it was pealed out from its socket. One could see deep into the orbital cavity, even to the lesser wings of the sphenoid.

Dr. Hall examined the patient minutely as to the possibility of his having contracted syphilis, but this he strenuously denied, so we arrived at the conclusion that the leeches must have been used previously on a syphilitic patient, and in this way poisoned his blood. Accordingly we ordered a mixture of corrosive sublimate and iodide of potassium and gave it freely. In a short

time a slight salivation was produced; from the hour that the mercury took effect, the sore eye began to heal, and fourteen days later a radical cure was effected.

Then, and not till then, the mother of the boy gave the true history of the case, viz: That her son, without the knowledge of and against the will of the father, had skinned a cow which died from murrain. His brother, who aided him, had at the same time a very small malignant pustule on his right arm, but had it burned out immediately with caustic.

There is, so far as I know, not a case of malignant pustule on record, where the internal use of corrosive sublimate as an antidote is recommended, and in so far this case may be an interesting one.

JEFFERSON AVE. AND BENTON ST.

RIGID OS UTERI; DILATATION MANUAL AND INCISION WITHOUT SUCCESS.

By CARL WALLISER, M. D., of Highland, Ill.

Mrs. B——, aged 27 years, primipara, was suffering much from fluor albus as a girl. On the evening of the 26th of July, 1876, she had the first pains which dilated the os to the size of a ten cent piece; since the evening of the same day no further advancement; the liquor amnii flowed very freely. On my arrival on the night of the 27th, I found the uterus in the condition of tetanus; the patient complained of continual pains, which left the local state of the os unchanged; the latter was open one-half an inch in diameter and was very hard, rigid; the portio-vaginalis and vicinity swollen; membranes ruptured; head in first position stood deep. As manual dilatation failed, I made with the buttoned bistoury, three lateral incisions in the os and gave, there being no appearance of further dilatation, morph. per os and subcutaneously; chloroform could not be borne; half an hour later I found the diameter of the os still unchanged; continual spurious pains with only short intervals; the os is so contracted that I could not introduce two fingers into it. I then ordered chloral hydras to be given in the dose of 1.80 (thirty grains). The first dose to be taken at 3 A. M., fifteen minutes after the exploration should dilatation be one inch; the intervals of pains becoming longer, a second dose (1. 80) was given at 4:20 A. M., and from that moment the os dilated fast. The application of the forceps not being permitted, I injected in order to alleviate the pains, 0.2 (three grains) ergot in the abdominal walls; at 4:40 A. M. the child was born. Mother and child did well.

Mrs. B., was again confined the first day of October, 1878; no medicine being given, all went well.

In the above described cases it was attested by the midwife, that at the beginning of the labor secalē powders were given. There is much abuse of ergot by midwives in this country. I have found, that when (which often happens) secalē was given in the first (dilatation) period, it arrests further development, because the uterus becomes tetanus-like contracted; the labor is thus made continual and the pains spurious. Every accoucheur should forbid to the midwife the use of secalē and its preparations before the expulsion period has begun and the head stands deep. If this rule is observed, many child-births will less frequently become abnormal, and the mortality and morbility of both mother and child will diminish.

AN UNUSUALLY SMALL CHILD. By T. A. WINN, M. D., Libertyville, Mo.

I take the liberty of sending you the following cursory account of an anomalous case that occurred in my practice, presuming that it would not be altogether uninteresting nor unprofitable:

I was called on hastily to visit a Mrs. H——, a multipara, who was represented by her husband to be suffering from excessive hemorrhage from the uterus. Upon arriving at the bedside I found that blood had been flowing more or less for about a week, and that the uterus was contracted powerfully, this accompanied with great pain. She was in the sixth month of pregnancy. She stated that these symptoms had been superinduced by lifting. My patient was a stout, hearty young woman, and had never had any trouble with former conceptions, always going to full term. I immediately instituted the usual treatment to control the contractions of the womb, hoping thereby to stop the hemorrhage and carry her through the critical period, and thus be enabled to prevent miscarriage. My hopes were not realized, for in about six hours she was delivered of a six months' old fœtus, a male child, tolerably well formed, weighing two pounds. It contained very little viability, and had to be faithfully worked with by friction and tepid bath impregnated with camphor and alcohol before there was much indication of resuscitation. It was fed on fresh cow's milk, diluted and sweetened. It finally revived so as to be able to move its limbs, take the nipple, and to perform the usual functions of a child that had gone to full time.

Of all the babies that I have had the honor of assisting to

make their entrance into this wide world of ours, during a practice of seventeen years, this one certainly beat them all. To give you an idea of its diminutive size, allow me to state that a lady who was visiting took a ring off one of her fingers and readily passed it around the hand and up over the arm. I was beginning to be quite hopeful of the little fellow's future, but I was disappointed, for in about eight days he passed away.

Will not some one of our gynæcological savants please inform us, through the columns of your valuable journal, if such minute specimens of Adam's race ever live to approximate anything like maturity. In concluding this too long and imperfect report, I can not but help notice the great contrast between the size of this child and those reported in the September number of the JOURNAL by Professors McPheeters and Maughs, the former weighing fifteen and one-half pounds, the latter sixteen pounds.

ON THE TREATMENT OF PLEURO-PNEUMONIA WITH NITRATE OF PILOCARPIN. By T. H. NEWLAND, M. D., of St. Louis.

As the season is fast approaching when we shall be called upon to treat the diseases of the thorax, and as there are a variety of modes of treatment resorted to, to check or at least to guide the patient to a favorable issue, it behooves us to be prepared with the easiest possible manner of giving relief as speedily as possible.

Pleurisy or inflammation of the lining membrane of the thorax and lungs, is ordinarily brought on by exposure to cold and dampness, in which case it is denominated idiopathic pleurisy.

Considering that in the first stages of both diseases there is an engorgement of the capillaries, both of the pleura and lung substance, I thought that diaphoretics and diuretics must certainly be of service.

There has lately came to the notice of the profession a remedy which in the future bids fair to be a very valuable addition to our materia medica. I allude to jaborandi. It is said to possess very powerful diaphoretic, diuretic and sialagogue properties. It was discovered in California, but was first used in South America. The action of the remedy no doubt depends upon the alkaloid, pilocarpin, which has been used lately by French physicians in phthisis. From reports of the therapeutic action of this remedy I was induced to try it in pleuro-pneumonia. So far

I have met with good results. Below I will cite one case in which I used the nitrate of pilocarpin.

P. R——, aged 55; complained of some pain in the side; found him sitting on the bed; respiration very much accelerated, beating 40 per minute; short, sharp cough, with constant pain in infra-mammary region; he could not lie on the affected side; the usual difficult elevation of ribs was present on auscultation; I also discovered the pathognomonic symptom of pleurisy, the friction sound. In addition I also found the crepitant râle of pneumonia with expectoration of rusty sputa; and upon percussion I found dullness distinct over the lower lobe of the lung. The diagnosis was therefore very clearly a case of pleuro-pneumonia. I commenced my treatment with the usual saline cathartic, and after having produced several good evacuations from the bowels, I commenced with the nitrate of pilocarpin, three-eighths of a grain hypodermically. I waited to watch the effects; this came on in about twenty-five minutes. The saliva began to flow copiously; in about ten minutes more active diaphoresis set in, which lasted an hour; after this my patient felt greatly relieved, in fact he could then lie down; his breathing became easier; had no pain; slept for four hours; respiration reduced to 29 per minute; I ordered warm poultices to his chest and repeated the hypodermic injection of three-eighths of a grain in the evening of the same day, after which the same symptoms re-appeared, the patient getting better after each dose. I used three-eighths of a grain for three successive days, twice a day. After the third day my patient was so much better that I discontinued the use of nitrate of pilocarpin, but continued the poultices to the chest, with the usual tonics of quinine, beef-tea, etc. This case I watched very carefully and can attribute the rapid improvement and prompt relief obtained to the use of the drug. I have treated similar cases but not with as prompt and speedy relief.

With this little description I hope that the profession will give it a fair trial, and report the results for the benefit of the profession, so that all may reap the benefit of the investigation.

1009 South Seventh Street.

Proceedings of Medical Societies.

ST. JOSEPH MEDICAL ASSOCIATION.

The regular weekly meeting of the St. Joseph Medical Association was held in the Court House, St. Joe, Mo., January 2d, 1879, at 7:30 P. M., President Dr. Donelan in the Chair, J. Geiger, Secretary. A good number of the members were present.

This being the annual meeting, the Association proceeded to the election of officers for the ensuing year, which resulted as follows:

President—Dr. Jacob Geiger.
Vice President—Dr. J. H. Stringfellow.
Secretary—Dr. S. F. Carpenter.
Treasurer—Dr. Hugh Trevor.

The outgoing President made a few appropriate remarks, and introduced the President-elect, Dr. Geiger, who, upon taking the Chair, made a lengthy speech.

On motion, the discussion of regular question, Epilepsy, was postponed.

Dr. Carpenter was appointed Essayist two weeks hence; and Fracture of the Clavicle the subject for discussion for the next meeting.

The Society adjourned.

DISTRICT MEDICAL SOCIETY OF NORTHWEST MISSOURI.

The fifteenth quarterly meeting of this Society met at the Court House, St. Joe, Mo., Jan. 9th, 1879, at 10 o'clock, A. M., President Dr. Geo. C. Catlett in the Chair, Dr. Jacob Geiger, Secretary.

The minutes of the previous meeting were read and approved.

The roll was called, and following were found present: Drs. W. H. Bryant, Savannah, Mo.; T. M. Laney, Savannah, Mo.; A. Goslin, Oregon, Mo.; J. M. Huffmann, Whitesville, Mo.; C. W. Spicer, Fillmore; W. W. Carter, Wathena, Kansas; I. L. Tracy, Rockport, Mo.; R. H. Smith, Craig, Mo.; Drs. Heddens, Trover,

Donelan, Siemens, Doyle, Geiger, France, Chesney, Richmond, Carpenter, Catlett, Smith, Christopher and Craig, of St. Joseph.

The Chair appointed Drs. Richmond, Tracy and Carpenter Committee on Programme. After short consultation they reported the following order of exercises:

Two o'clock P. M., Essay by Dr. W. A. Bryant.
Three o'clock P. M., Essay by Dr. Geo. C. Catlett.
Four o'clock P. M., Essay by Dr. Jacob Geiger.
Five o'clock P. M., Essay by Dr. J. Leigh.
Seven o'clock P. M., Essay by Dr. T. H. Doyle.
Eight o'clock P. M., Essay bv Dr. A. Goslin.
Nine o'clock P. M., Essay by Dr. W. I. Heddens.
Ten o'clock P. M., discussion of question, Pneumonia, and reports of cases.

Report was adopted.

On motion of Dr. Doyle the resolution to amend Article 5, Section 3 of Constitution, in reference to election of members, be taken up and acted upon. Resolution was voted on and carried, changing the vote from a four-fifths to a two-thirds vote.

Dr. G. W. E. Chamberlain, of Rockport, Mo., and Dr. J. C. Farr, of Alanthus, Mo., made application for membership. The Committee on Election reported favorably on the applicants. They were balloted for and elected.

The Committee on the Revision of the Constitution and By-Laws read their report, which was laid over until next meeting for final action.

The Society adjourned until 2 P. M.

AFTERNOON SESSION.

The Society was called to order by the President, Dr. Catlett, at 2 P. M.

Dr. A. B. Allen, of Barnard, Mo., made application for membership, and was elected.

Dr. Bryant, of Savannah, Mo., read an excellent paper on Lacerated Perineum, and exhibited a needle for the operation after his own plan. Paper received and referred to Committee on Publication.

This very interesting subject was thoroughly discussed by Drs. Siemens, Richmond, Goslin, Geiger, Doyle, Christopher, Spicer, Catlett and Craig.

Dr. Geiger, of St. Joe, read an essay on Electricity in Surgery. Discussed by Drs. Carpenter and Siemens.

Adjourned until 7:30 P. M.

EVENING SESSION.

The Society convened at 7:30 P. M., Vice President Dr. Hugh Trevor in the Chair, Dr. Craig acting as Secretary, *pro tem.*

Dr. Doyle read a very able and lengthy essay on the Disorders of Menstruation, which was discussed by Drs. Richmond, Goslin and Craig.

Dr. Goslin presented an interesting specimen of intussusception of the bowel.

Dr. Spicer opened the discussion on the regular subject, Pneumonia. A lively debate followed on the subject between Drs. Christopher, Siemens, Goslin and Craig.

Dr. Craig presented a pathological specimen, Fibro-Cystic Tumor of the Ovary, removed by Dr. E. W. Bliss, of Hiawatha, Kansas.

Dr. Richmond requested an opportunity to enter a plea for the prompt use of the forceps.

Drs. Richmond, Doyle and France were appointed a committee to prepare programme for next meeting.

The committee, after a short consultation, reported as follows: Essayists, Drs. R. H. Smith, C. W. Spicer, C. J. Siemens and D. J. Christopher. Subject for discussion: "Which are the best remedies to improve appetite, digestion and assimulation." Report adopted.

Drs. Catlett, Goslin, Bryant, Donelan and Trevor were appointed a committee to draft a petition to the State Legislature to establish a State Board of Health; also to correspond with the different medical societies to insure a concert of action.

Adjourned until April 10, 1879.

THE HOWARD COUNTY MEDICAL SOCIETY.

The Howard County Medical Society met in Fayette, Mo., pursuant to adjournment, September 2d, 1878.

The meeting was called to order by Dr. I. P. Vaughan, President of the Association.

The minutes of the preceding meeting were read and adopted, and, the roll being called, the following gentlemen answered to their names, viz.: Drs. I. P. Vaughan, M. B. Collins, J. B. Scott, B. E. Dawson, J. T. Bailey and U. S. Wright.

Under the head of "reports from committees," Dr. Vaughan reported that he had heard nothing definite from Dr. Bonham, Jr., in reference to his practice of the secret pile remedy, and asked further time to consider with Dr. Bonham before action be taken by the Society, which request was granted him, extending the time to our next meeting.

Dr. Scott read an essay on the "Treatment of Epilepsy," giving a variety of remedies used by the most skillful physicians, both of Europe and America, many of which he had used on some two or three patients with but little good accruing, but he thought he had derived more benefit from the use of a prescrip-

tion recommended by Dr. U. C. Fleming in an article published in Brinton's *Half-Yearly Compendium of Medical Sciences*, which he gave to the Society. It consisted of the hydrocyanate iron, valerianate quiniæ, cyanate of zinc and extract hyoscyamus. The Doctor urged the members of the Society to more fully test its merits. After the essay was read the members of the Society had quite an entertaining discussion upon the etiology, pathology and treatment of the disease under consideration.

Dr. Collins next read a paper on the use of ergot in a variety of diseases, recommending its use both internally and externally. He had not fully tested its merits in all the diseases mentioned, but spoke with positiveness as to its good effects in hæmoptysis; also of the happy effect produced by its use in conjunctivitis. He was anxious that all its virtues should be more fully known to the profession, and hoped that further experience with its use would make it worthy of still more confidence by the profession. The Doctor's essay was fully appreciated by all present, and his views were fully substantiated by the experiences of the members of the Society.

Dr. Dawson read an essay on the subject of "Satyriasis," which was novel in its construction and quite interesting to the Society. The Doctor fully appreciates the advantages to be gained to the Society by every member bearing his part of the duties assigned him, and, although absent from the Society at our last meeting, he came prepared to give his production as a voluntary contribution.

After the discussion of the papers, the members entered into the discussion of hæmorrhoidal tumors, expressing confidence in their ability to cure piles by the various methods of treatment known to the profession, with as slight pain, as little detention from business, and in as short a time, as can be done by anyone of those who are now heralding their infallible cure.

The meeting was a very interesting one, and was in every way calculated to strengthen the bonds of union between the brotherhood. As time was limited, the subject of "Nævi" was continued until our next meeting, when Dr. Vaughan will open the discussion with a paper upon the subject. The subject of "Malaria" was also adopted for discussion.

Drs. J. W. Southworth, J. W. Hawkins and J. A. Biles were appointed as essayists for our next meeting.

On motion of Dr. Collins, and by a vote of the Society, Glasgow was selected as our next place of meeting.

On motion of Dr Dawson, the Society adjourned until the first Monday in October, 1878.

I. P. VAUGHAN, President.

U. S. WRIGHT, Secretary.

The Howard County Medical Society met in Glasgow, persuant to adjournment, Oct. 7th, 1878.

The meeting was called to order by Dr. I. P. Vaughan, President of the Association.

The minutes of the preceding meeting were read and adopted, and the roll being called the following gentleman answered to their names, viz:

I. P. Vaughan, John T. Bailey, Vaughan Bonham, J. A. Biles, B. E. Dawson, M. B. Collins, B. E. Powell, I. W. Harkins, J. W. Southworth and U. S. Wright.

Dr. Vaughan was called upon for the matter of reference in regard to Dr. Bonham's resignation, as presented to the Society, whereupon, Dr. Bonham being present, made a statement to the Society as to his regret for his action in violating the rules of the Society, by advertising as he had done his secret pile remedy, in which statement he gave a history of his connection with this man Thornton, who came to his father bearing testimonials from Dr. Freeman, etc., all of which statement being satisfatory to the Society, upon his withdrawal of his written resignation from the Society, and on motion of Dr. Collins he was continued in full fellowship.

Reading of papers being next in order, Dr. J. W. Southworth read an interesaing essay on "Transfusion of Blood," in which he gave a detailed account as to what was transfusion and of its being practiced even in the early ages of the world's history, following its results from that period to the present in its beneficial effects to those brought near death's door. He urged his brethren to be ever ready to perform the operation, whenever by traumatic or other causes their patients were in absolute need of that live-giving fluid, blood. The merits of his article were duly appreciated by all present.

Next came the discussion of subjects, and Dr. Vaughan, as per appointment, favored us with quite an entertaining and elaborate treatise on "Malaria," what it is not and what it is. The article was a scientific one.

Dr. Wright read before the Society a letter from Dr. French, of Mexico, in reply to a postal written by Dr. Wright with reference to Freeman's remedy for the cure of piles. Dr. French sent the desired information in printed form, said to be a true copy of Freeman & Reily's pile cure, given in detail. After reading the letter, and prescriptions for the cure of the piles and fistula, by a vote of the Society it was decided that the recipe should be published.

"Some use equal parts of carbolic acid and sweet oil; others use glycerine in place of the oil; while others prefer the acid alone and in full strength. The prescription that has been sold as a secret remedy is the following: Phenol (carbolic acid,) 6 drams; naphthaline, 2 drams; acetate morphine, 10 grains; tannic acid, 5 grains; hydrastis in a little chloroform and then

add other ingredients. Inject five or six drops of the prescription into the pile tumor, operate on one at a time, and let the operation be ten days apart. For ulcerated bowels we use alum, rosin, hydrarg, naphthaline and glycerine. Mix and use as an injection two or three times a day, a tablespoonful at a time. For fistula we use white iodine or sulphate of copper. Envelop in a thin layer of cotton and put into fistula openings. A physician will readily understand its mode of treatment. As a local application after the hypodermic injection of the pile tumor, we use equal parts of calomel and tannic acid, or the iodide of potassium; mix them together with linseed oil to make it about the consistency of cream, and apply with a camel hair pencil."

"The Origin of Epidemic Diseases" is the subject for discussion at our next meeting. The idea is, do they originate from one and the same cause. There was no one appointed to open the discussion. Dr. Vaughan made the selection.

Drs. Biles, Hawkins and Bonham were appointed as essayists at our next meeting.

On motion of Dr. Bonham, Society adjourned to meet in Fayette, on the first Monday in November, 1878.

I. P. VAUGHAN, President.

U. S. WRIGHT, Secretary.

Periscope of Current Medical and Scientific Literature.

THE PRACTICE OF MEDICINE.

ENEMATA OF CHLORAL IN SICK HEADACHE.—Dr. J. Seure (Bull Gen. de Therap., 1878, p. 365,) recommends this treatment very highly. He says that a patient of his, a lady who is subject to severe attacks of migrain after shopping, etc., is accustomed, on her return home, to take an enema consisting of a glass of warm water with a tablespoonful of the following mixture: Chloral grs. xiv, aq. dist. fl. ʒ x. She then reclines upon a sofa, with closed eyes. Within a few seconds she begins to taste the chloral in her mouth, and at the same time she experiences a sensation of numbness. Little by little the headache disappears, nausea is allayed, and a half hour later nothing remains but a slight discomfort in the head, with a little torper. Within an hour this lady finds herself able to sit down to dinner, and by the time the meal is over she has forgotten all about her headache, and is able to entertain visitors during the evening. In this case twenty

grains of chloral are enough, but in the case of men thirty or forty grains are required. Dr. Seure has noticed that the relief gained is more prompt if a tablespoonful of brandy or whisky is added to the enema. The enema has one disadvantage, that is the slight burning pain it causes in the rectum. This may be avoided by the use of a glass of warm milk instead of warm water, or better by beating up the yolk of an egg in the water. In the case of individuals who retain the enemata with difficulty a smaller amount may be injected, and a drop or two of laudanum may be added. Dr. Seure regards this treatment as almost infallible for the arrest of sick headache, and as decidedly preferable to the administration of remedies by the mouth. It has the advantage of not disturbing the stomach. Chloral acts also very promptly, its absorption by the rectum being almost instantaneous, as is proved by the effects on the general system, and also by the exhalation of chloroform by the lungs within a few seconds after the enema has been taken.

IS IT SAFE TO PUNCTURE IN HEPATIC ABSCESS?—An important contribution to this subject is contained in the *Lancet*, Nov. 16, from Surgeon Maj. M. C. Turnell, senior physician to the General Hospital, Madrid, who has had, of course, very wide experience in this disease. He gives a number of cases, and his opinion of the operation is thus expressed: "In the following histories it will, I think, be seen that even when none but the most ordinary precautions which any careful surgeon would take in opening an abscess in such an important region, are adopted, the great bug-bear—entrance of air—does not, as asserted by Surgeon Maj. Lowe, and so feared by Dr. Budd, 'invariably' take place, and the remaining cases show that if antiseptic precautions are taken, and above all, any attempt at squeezing the abscess be avoided, the simple incision by the scalpel, followed by puncture with a trocar, is preferable to the forcible extraction of pus by an aspirator, and that keeping the wound open by a piece of carbolized lint is immeasurably superior to allowing the canula to remain in, as recommended by Dr. Murchison, and so frequently practiced by the older surgeons."

THYMOL AND ITS USES.—As an antiseptic, thymol is much more powerful than either phenol or cresol (carbolic acid). Ranke uses a solution of one part of thymol to one thousand parts of water, instead of the carbolic solution of Lister. Dr. B. Kussner, of Halle, has tried it internally. In doses of three to five drops of one per cent solution he found it useful in the diarrhœa of children. An inhalation of one part to one thousand of water reduced the fever and expectoration in phthisical cases. Animals poisoned with thymol sink into a profound coma. After death their blood is dark and fluid. Fatty degeneration of internal organs is, however, not found. Injected into the veins

it lowers the temperature and induces stupor.—*Medical and Surgical Reporter.*

THE TREATMENT OF DIARRHŒA BY OXIDE OF ZINC.—Dr. Jacquier, of Nantes, uses the following formula: oxide of zinc, grs. lv, bichromate of soda, grs. vijss; in four packets, one to be taken every six hours. The results are considered to have been very satisfactory, inasmuch as in several cases the malady had endured from one to many months, and other methods of treatment had not produced any improvement. Thus, he concludes, that although by no means to be held as exclusive treatment, the employment of oxide of zinc deserves to be more generally known as useful in diarrhœa.—*British Med. Jour.* Sept. 28, 1878.

HYPODERMIC INJECTION OF DIALYZED IRON IN CHLOROSIS.—Prof. Da Costa reports vast improvement in the condition of a young woman aged 21, suffering from chlorosis, after the injection of dialyzed iron hypodermically for a fortnight. Hitherto iron has not been used in subcutaneous injections, as it is liable to cause irritation and abscesses, even with the tartrate, which is one of the mildest forms. The solution of dialyzed iron was found to be free from these drawbacks, even used consolidated. The punctures caused by the syringe show no signs of inflammatory action. In no case was there costiveness or disordered digestion, which are too often the after effects of the use of iron. Daily injections of fifteen minims of pure dialyzed iron was at first given, and this was gradually increased to twenty, twenty-five and thirty minims per day. Under this treatment the color gradually came back to the patient's lips, gums and tongue; her appetite was good, her bowels regular, and her headache gone. She was considered practically cured.—*Philadelphia Med. Times. Practitioner.*

TREATMENT OF SEVERE BED SORES.—Dr. Dyce Duckworth communicated to the American Dermatological Association meeting of 1877 a short paper on this subject. He recommends that in addition to the use of the water bed that the patient should lie with the buttocks and sacrum constantly upon poultices. These should be made of linseed, and if there be much discharge of fœtor, the cataplasma carbonis should be used. These should be made of pure linseed, and frequently changed; they must be large, and secured in position by a binding sheet secured over the abdomen by safety pins; the balsam of peru should be added if there is deep excavation and sloughing.—*American Med. Bi-Weekly.*

URTICARIA—BISULPHATE OF SODA.—Dr. Carter, Mt. Jackson, Ind., states that the hypodermic injection of a saturated solution of the bisulphite of soda in urticaria is the most prompt remedy in relieving this troublesome affection he has yet tried. It appears to act upon the periphery of the cutaneous nerves as does

belladonna, except that the latter has a heating and the other a cooling effect.—*Med. Brief. American Med. Bi-Weekly.*

INTESTINAL HEMORRHAGE.—An ounce or two of oil of turpentine in half or one pint of a tepid menstruum arrests, like a charm, intestinal hemorrhage, even when patients seem moribund.—*Dr. Hutton.* J. M. S.

OBSTETRICS.

THE ACTION OF MEDICINES UPON THE FŒTUS IN UTERO.—This subject has received considerable attention at the hands of quite a number of European physicians, and offers a field well worthy of careful research. The anti-syphilitic virtues of mercurials and of iodide of potassium, when given with a view to their influence upon the fœtus, have been well established by Weber, of St. Petersburg, and others. Recently numerous experiments have been instituted in Germany demonstrating the possibility of certain substances entering the circulation of the child when administered to the mother. Dr. Gusserow, of Strasburg, after administering iodide of potassium in full doses to the mother for some days or weeks prior to delivery, detected iodine in the liuqor amnii and fœtal urine. Benicke gave salicylic acid to twenty-five women during labor, and found it in the urine of the children immediately after birth.

EXPRESSION OF THE PLACENTA.—In his "System of Midwifery," Dr. Playfair lays much stress upon and introduces a cut illustrating his method of removing the placenta in ordinary cases of labor. He waits fifteen or twenty minutes, when, under gentle kneading, the uterus will generally contract or harden under the hand, which grasps the fundus uteri. As soon as contraction is felt, strong and firm pressure should be made downwards and backwards in the axis of the pelvic brim. This maneuver is to be repeated, if necessary, with each successive contraction of the uterus, until the placenta is expelled. Dr. Playfair's faith in this method is thus expressed. He says: "I repeat that, after a little practice, the placenta may be entirely expelled in this way, in nineteen cases out of twenty, without even touching the cord, and the bugbear of retained placenta will cease to be a source of dread."

THE TRANSFUSION OF BLOOD.—John H. Brinton, M. D., in a lecture delivered before the medical class of Jefferson Medical School, says: I wish to call your attention to-day to an operation which some of you will no doubt be occasionally called

upon to perform, and which has long attracted and still continues to attract the attention of the profession. I propose to tell you how and when to perform this operation, and to show you the implements necessary for its performance.

There are, as you all know, many conditions in which men and women lose so much blood as to become exsanguine, and be in danger of dying from its loss. When in this condition, the only means at his power which the surgeon has of putting the vital fluid back into the system of his patient is by its transfusion from the veins of a healthy person.

In my estimation, the reason why the operation has always been so unsuccessful has been because it has invariably been performed too late. It should be done early, and before the patient is in a moribund condition.

In what cases should it be done? you will perhaps inquire. The diseases and states of the system in which the operation is demanded are many in number. Among these may be mentioned anæmia and chlorosis, gastric ulcer, post-partem hemorrhage, typhoid fever, puerperal fever—any disease, in fact, in which there is no organic circulatory lesion, but simply a mechanical loss of blood.

How is the operation to be performed? The blood must be drawn from the veins of some one who volunteers to provide it, and then, after due preparation, it must be injected into the veins of the sick person. When we think of the physical and chemical characters of the blood, we see at once how careful this preparation must be. If clots form in the injected blood, there is great danger of embolism. The admittance of air into the veins is equally dangerous. I remember one case in my practice when death was instantaneous from the admittance of air. I intend to show you how to avoid the clots, and how to keep out the air.

The operation of transfusion is one in which an assistant is absolutely necessary. This assistant must be adroit, must be well acquainted with the phenomena of coagulation, and must attend altogether to drawing the blood from the person offering himself for that purpose, and to the preparation of the blood thus drawn for the use of the surgeon.

Suppose, then, that I am called to perform transfusion in a case of intestinal or gastric ulcer, where a large amount of blood has been lost. I take with me an assistant whom I can thoroughly trust. He attends to the donor of the blood and I to the patient.

First, then, as to the withdrawal of blood from the donor. The drawing of blood is one of the rarest of operations nowadays. In old times it was very common. Blood is usually taken from the left arm, as the right arm is used more than the left. The vein from which the blood is taken is either the median cephalic or basilic. As a rule the median cephalic is

chosen. My rule is to bleed wherever a large vein can be found, no matter what vein that one may be. Before opening the vein, I take a fillet and tie it around the arm just above the point of incision. I give a stick to the donor to hold in his hand, and tell him to keep his fingers in continual motion, opening and shutting them upon the stick. This brings all the muscles of the forearm into play, and so causes an increased flow of blood to the parts.

Do any of you know the origin of the red and white barber's pole? It is nothing but the bleeder's stick. In old times barbers attended to many points of treatment which nowadays come within the sphere of the surgeon. Among other things, they were in the habit of bleeding, cupping, etc., and so the bleeder's red and white pole has come down to us as a symbol of the "tonsorial art," as the professors are pleased to call it.

In opening a vein I generally use a lancet, or rather my assistant uses one. All the blood which is the result of the bleeding must be received in a proper vessel. A great many vessels have been designed for this purpose, but I think that the simplest implements are always the best. I know that most hospitals are provided with a most complicated vehicle for the reception of the blood and the maintenance of its temperature, but I have devised a very simple vessel for use in my private practice. This is a common tin pan with an opening above, *i. e.*, a spout, and a vent below. On one side it has a little slide in which an ordinary thermometer is placed. Inside of the pan are two closed funnel-shaped vessels fitting into each other and provided with lips. The pan is filled with water at 116° F. From repeated experiments made, I know that any blood drawn into the inside funnel-shaped vessels in this pan containing water at 116° F. will be kept at a temperature of 98°. Before using any part of the apparatus, however, I soak it all in water raised to 116° F. The spout and vent are very useful to me, for, if the temperature is too high, I can draw out some of the hot water by means of the vent and pour in some cold water through the spout. Beside the assistant, who draws and whips the blood, another assistant is always necessary to keep an eye on the thermometer in the pan and see that the mercury is kept steadily at 116° F. As common thermometers vary, the one used should be tried before the time of operation.

What kind of an opening is to be made in the vein of the patient who is to donate the blood? A good, large, oblique opening should be made, so that the blood will flow rapidly. As some five or six ounces of blood, at least, must be drawn, we do not want the donor to faint, and so we make him sit down while the blood is flowing and administer restoratives at the first sign of syncope.

We will suppose, then, that six ounces of blood have been drawn by the assistant. The fibrin must be removed from this

blood. How is this to be done? The best thing for the purpose of whipping this fibrin out of the blood is a well cleansed and neatly tied up bunch of broom. Some physicians use regular egg-beaters for this purpose, but, as several beaters are necessary, I think the broom much more handy. All the while that the blood is being drawn the assistant keeps stirring it. When he raises one bunch of broom out of the vessel and finds it covered with strings of fibrin, he throws it aside and takes another. The broom I use is carefully boiled and dried beforehand.

When enough blood has been drawn, all that is necessary to do for the donor is to lay a plug of lint over the vein, pass several turns of a roller about the arm, administer a little brandy and water, and put him to bed.

But the blood which has been thoroughly beaten up still contains air in it. To get rid of this air it is necessary to strain the blood through a fine damask napkin. Here is where the outer funnel-shaped vessel is of value. A damask napkin is stretched over its brim and the blood from the other vessel strained through it.

The blood thus whipped and strained has lost its bright color; is dark in appearance, but still perfectly fluid. All the work thus far has been done by assistants. In the meanwhile I have been opening a vein in the recipient's arm and putting in a tube. There is no difficulty in finding a vein in the living subject except when the patient is unusually bloodless. I have a tube for injecting blood given me by O'Connoll, of Dublin. This tube has its eye on the top instead of at the end. This is very useful in some cases, but I generally employ a canula attached by rubber tubing to a syringe. This syringe, which I show you, was chosen by me from a lot of Viennese syringes, and is a most reliable implement. It holds just four ounces. Before using it the syringe must, of course, be dipped in water at a temperature of 116° F., so that it may keep the blood contained in it at 98° F.

After inserting the tube into the vein, I am accustomed to tie it in position. This is done by passing a broad thread beneath the vein. Before putting the tube into the vein, care must be had to see that the two currents of blood touch each other exactly, and that no bubble of air intervenes. After the tube has been tied in the vein, pressure may be slowly instituted on the handle of the syringe, and the blood gradually forced into the circulation. During this procedure the patient's face must be carefully watched, and the opposite pulse held by the trained assistant. The blood should always be thrown in very slowly. The funnel-shaped pan containing the blood ought to be properly graduated so that we may know exactly how much blood we are using. After the blood has been injected, the ligature round the vein must be cut and the tube withdrawn. A plug of

lint should then be placed over the wound and gentle compression instituted.

THE INTRAVENOUS INJECTION OF MILK.

In consequence of the great percentage of death in general practice from the effects of the transfusion of blood a new operation has of late years been proposed—that of the intravenous injection of milk. Thus far only about twelve cases, where milk was injected into the veins, has been put on record. Of these, three were performed by Dr. Edward M. Hodder, of Montreal; two by Joseph W. Howe, of New York; three by Dr. T. Gaillard Thomas, of New York, and four by Dr. Charles T. Hunter, of this city.

The advantages claimed for milk which show it to be a fluid more fit for intravenous injection than blood are that there is no danger of coagulation, and none of the passage of air. Moreover, milk is more allied to chyle, the material of which nature makes blood, than any other fluid with which we are acquainted. We all know that chyle from the *receptaculum chyli* empties directly into the subclavian vein after passing through the thoracic duct. This chyle, upon its entrance into the blood, is a whitish, oily, milky-looking fluid. Chyle is claimed by Dr. T. Gaillard Thomas (The Intravenous Injection of Milk as a Substitute for the Tranfusion of Blood. Illustrated by seven operations. By Dr. T. G. Thomas. Reprinted from the *New York Medical Journal*, May, 1878. D. Appleton & Co., N. Y.), to be not very unlike milk in its composition. "Chyle," said he, "is fat in emulsion in a serous fluid. Milk is fat molecularly divided and suspended in water with casein and sugar." The objections which have been raised to the use of milk are that "the casein will cause obstructions in the small arteries; and that the emunctories, in endeavoring to eliminate it, will be overwhelmed by congestion." These objections Dr. Thomas answers by showing how nearly similar in their constitution milk and chyle are.

The kind of milk which is generally used is the milk of the cow, although, in a very celebrated case of intravenous injection of milk which occurred recently in this city, the milk injected was that of a goat, which was brought into the pantry of the house where the patient was lying, and milked there. In one of Dr. Joseph W. Howe's cases also goat's milk was used. The results thus obtained from the intravenous injection of milk have been moderately good, much better, certainly, than those obtained in surgical practice thus far by the transfusion of blood. Two of Dr. Hodder's, one of Dr. Howe's, two of Dr. Thomas', and one of Dr. Hunter's cases, were followed by very marked improvement. That is to say that out of the eleven cases in all already published, six have been successful, i. e., have been followed by marked improvement. Indeed, the fact seems to be that, had the injection only been made earlier in those cases where bad results followed, its effects might have been most ex-

cellent. In one of Dr. Hunter's cases—one of hemorrhage from the bowels as a result of typhoid fever—the patient rallied most wonderfully after each operation, and was only carried off at last by a most copious and draining hemorrhage. In one of Dr. Howe's cases the milk had been carried from such a distance as to be slightly decomposed before injection; hence the fatal result. According to Dr. Thomas, Dr. Eugene Dupuy, of New York, has shown that the intravenous injection of decomposed milk into dogs is uniformly fatal; whereas the same experiment, if practiced with perfectly pure and fresh milk, is entirely innocuous. In the other fatal case of Dr. Hunter's—one of Addison's disease—the operation was only attempted as *un dernier ressort.*

Dr. Thomas sums up the results of his operations as follows:

1. That the injection of milk in place of blood is perfectly feasible and safe.

2. That none but milk removed from a healthy cow within a few minutes of the time of injection should be used.

3. That the intravenous injection of milk is infinitely easier than the transfusion of blood.

4. That the injection of milk, like the transfusion of blood, is commonly followed by a chill, and a rapid and marked rise of temperature.

5. That not more than eight ounces should be injected at one operation.

6. That lacteal injections should not be limited to cases prostrated by hemorrhage, but should be employed in disorders which greatly depreciate the blood, such as Asiatic cholera, pernicious anæmia, typhoid fever, etc., and as a substitute for diseased blood in certain affections which immediately call for the free use of the lancet, such as puerperal convulsions, etc.

In performing the operation for the intravenous injection of milk, certain simple forms of apparatus are used. Dr. Thomas uses a glass funnel, having attached to it a piece of India-rubber tubing, with a very small canula at its extremity. The injections were always made into either the median basilic or cephalic vein of the left arm. Dr. Charles T. Hunter, who has performed the operation of transfusion several times, and has recently had three cases of milk injection to which reference has already been made, uses a form of apparatus slightly different from that of Dr. Thomas. Dr. Hunter, instead of a glass funnel, employed one of brass. His canula is only from one-twelfth to one-eighteenth of an inch in diameter, being smaller in caliber than the cephalic vein itself, and is connected with the funnel by means of a piece of rubber tubing about two feet in length and about one-sixth of an inch in diameter. His canula is silver plated, provided with a carefully-constructed stopcock, and ends in a very fine point. Dr. Hunter does not pierce the vein through intervening skin and tissues, but makes an incision about one-half an inch long over the course of the vein, dissects

the vein away from the surrounding tissues, raises it on a grooved director, and then plunges the canula directly into it. He does not consider it necessary to tie the canula in position, but thinks that it is amply constricted by the wall of the vein.

He always strains the milk before injection. The question has frequently been raised as to whether the effects following the intravenous injection of milk are not due entirely to the presence of a stimulating liquid in the blood and its action on the walls of the heart; whether it can, therefore, be said to do anything more than merely tide the system over a state of marked depression; whether, in fact, the result obtained is any other than that produced in certain cases of epidemic Asiatic cholera by the injection of simple salt and water into the circulating fluid of the body. This is a point which has not yet been definitely settled.

With regard to the evident obstruction to respiration immediately following the injection in many instances, and the presence of marked albuminuria, all that I can say to you is that the pulmonary obstruction is said by some to be produced by the formation of casein in the arteries of the lungs, and that the albuminuria which follows the transfusion of blood, as well as the intravenous injection of milk, may be produced by the simple ingestion of unusually large quantities of the white of egg.

As far as my own practice is concerned, I think that, in future, I shall try the intravenous injection of milk in preference to the transfusion of blood. I have transfused a great many patients of late years, both in private and hospital practice, and my results have been very far from reassuring. I think the proposed intravenous injection of milk offers us much better results, judging from the cases published by Dr. Thomas and those in this city. The main obstacle to complete cure, as I have already said, thus far has been the late period of the disease at which the injection has been attempted. Though the exact *rationale* of the action of milk, thus introduced, upon the system has not been satisfactorily shown, I think this operation will, in a few years, have entirely superceded the transfusion of blood, which later operation is now being rejected as at once dangerous and unavailing in many parts of the country, and by many surgeons of authority and deserved eminence in their profession.—*N. Y Med. Record.* W. C.

PHYSIOLOGY.

UREA FORMATION.—Recent experiments made by Prof. Gamgee, of Owen's College, Manchester, to determine the seat of the urea formation in the body, demonstrated that the liver is the principal if not the only organ of the body concerned in such formation.

WOMAN'S RIGHTS PHYSIOLOGICALLY CONSIDERED.—We find, therefore, that throughout the class mammalæ the respective tasks of the two sexes are precisely such as we find in our own species; the male is the defender and provider, whenever such defense and provision is necessary; the female is the nurse.

The man who brings home to his wife his weekly earnings, his professional fees, or his share of profits of a business, merely repeats on a higher scale the action of the lion who carries a deer or an antelope to his den.

Each sex fulfills the tasks for which it is especially adapted by nature, and anything like "subjugation" is out of the question. Were the duties of the two sexes confounded together, or still worse, were they inverted—the female for instance, going forth to face danger or to hunt for prey, while the male was left to nurse the young—the position of the species in the great and constant struggle for existence would be very decidedly altered for the worse. We must conclude, therefore, that the attempt to alter the present relations of the sexes is not a rebellion against some arbitrary law instituted by a despot or a majority—not an attempt to break the yoke of a mere convention; it is a struggle against nature; a war undertaken to reverse the very condition under which not man alone, but all the mammalian species have reached their present development. Sentimental speakers and writers have commented on this well-known fact, that even a very young boy will, to his utmost ability, defend his sister or female playmate, and have expressed a hope that his habit, the result of early training, would wear out, the female no longer needing, and the male no longer offering protection. Alas! is the very same habit in the ape, the lion, or the bison, the result of a mistaken training, or of an old world convention, to be laid aside in these enlightened days? What would be the position of a family of young lions if both their parents went forth to hunt? Yet very similar will be that of children, if their mother, as well as father, goes out to the daily toils of a profession, leaving them perhaps to themselves—perhaps to the care of ignorant and unprincipled hirelings.—"Biology and Woman's Rights" in *Popular Science Monthly*, Dec., 1878.

PARENTAL RESEMBLANCES.—Dr. G. Gregory writes to the *British Medical Journal:* For several years I have noticed, in hundreds

of instances, that the first-born son frequently resembles in facial appearance his mother, or one of her ancestors, most frequently her father. The first-born daughter, in about six out of every seven cases partakes of her father's likeness, or his mother's features. When parents have four or five children, the children which follow are most frequently compounds of both parents in personal appearance.

ACTION OF BILE ON FOOD—In some animals, at least, bile contains a ferment capable of converting starch into sugar; but its action in this respect is wholly subordinate. On proteids bile has no direct digestive action whatever. Bile has a slight solvent action on fats, as seen in its use by painters. It has a slight, but only a slight emulsifying power. The wetting of membranes with bile, or with a solution of bile salts, assists in the passage of fats through the membrane. It is probable that the bile is more useful when combined with pancreatic juice than when acting by itself.—*Foster.*

HARVEY AND HIS DISCOVERY.—Harvey in his earlier prefaces, promised to give full account of the labors of those who preceded him. There is strong evidence in his works that he failed to do so; he most certainly published without due credit more or less what he had learned from his Italian teachers. Dr. DaCosta treats with the severest scorn any and all who question Harvey's claims to the sole and exclusive discovery of the circulation, and speaks of it as the common fate of genius to have its conquests attributed to others. But here he interprets history unfairly. Nearly all great discoveries and inventions occur to several different minds almost simultaneously. The laws of intellectual evolution necessitate this. History is full of examples. Need we mention Adams and Leverrier, Morse and Henry, and the numerous others who reasoned out the same truths at almost the same time, wholly independently.—*Med. and Surg. Reporter.* I. N. L.

DISEASES OF CHILDREN,

ACTION OF MURIATE OF PILOCARPIN IN CHILDREN.—Dr. Demme, of Berne (*Cent. Zeit. für Kinder. Heilkunde*), has admistered muriate of pilocarpin to 33 children; of these, 18 suffered from desquamative nephritis after scarlatina, 3 from nephritis after diphtheria (without scarlatina), and a high degree of dropsy. In 12 cases the diseases were dropsy, from disease of the valves of the heart, multiarticular rheumatism, whooping cough, broncho-pneumonia and parotitis. The ages of the children varied from nine months to twelve years. The dose administered

subcutaneously was, up to the second year, 5 milligrammes ($\frac{1}{12}$ gr.); from the second to the fifth year, 7.5 milligrammes to 1 centigramme ($\frac{1}{8}$ to $\frac{1}{6}$ gr.); and from the seventh to the twelfth year, 1 contigramme to 1½ centigrammes ($\frac{1}{6}$ to $\frac{1}{4}$ gr.). The injections were well borne except in two cases. In one of these, vomiting, hiccup, pallor of the face, and syncope; in the other, hiccup and twitchings of the limbs appeared from three to five mintues after the injection. The proper action of the pilocarpin was imperfect in both of these cases. Pilocarpin was found to be an excellent diaphoretic and sialagogue. The latter action was more marked in very young children, the former in older ones. The action usually commenced from 3 to 7 minutes after the administration, increased up to 15 minutes, remained at its height up to 20 or 40, and, in rare instances, 75 minutes, and then gradually ceased. There was an inconsiderable fall of the temperature. The frequency of the pulse increased by 20 to 40 beats; the pulse wave was full. The amount of urine was only exceptionally increased; in two cases there were watery stools. Dr. Demme arrives at the following conclusions: 1. Pilocarpin is an effectual diaphoretic and sialagogue in children. 2. It is borne very well in appropriate doses, even by children of very tender years. 3. Unfavorable after symptoms are but rarely observed, and probably, may be altogether prevented by the administration of small doses of brandy before the injection. 4. The condition in which it is chiefly indicated is parenchymatous inflammation of the kidney, with dropsy, following scarlatina. 5. Pilocarpin does not appear to exercise an influence on the heart's action. —*London Med. Rec.*, Aug. 5th, 1878.

TREATMENT OF PROLAPSE OF THE RECTUM IN INFANTS.—Dr. Settimio Basevi (*Wein. Med. Presse*, 1878, p. 1,153) speaks of the ordinary method of treating this accident, viz.: the application of a simple bandage after reduction, as being inconvenient and insufficient; it must be removed before each defecation. Basevi has suggested a new method which he has used successfully in a number of cases. In one, where the gut protruded four inches and had been out three or four days, it was reduced and cured within twenty or thirty days. Basevi's operation is as follows: He cauterizes the mucous membrane of the intestine lightly with nitrate of silver, and replaces the gut. Subsequently, enemata of tannin, alum and ice water are ordered, together with very strict diet, with a view to prevent entiritis. Should these measures fail and the intestine continue to come down, he uses his bandage as follows: The child is held by two nurses, with its buttocks up over the bed, one securing the upper portion of the body, the other the slightly abducted knees somewhat up in the air. This position is most favorable for the reduction of the prolapsed rectum, because the child can not bear down. After reposition, the surgeon stands on the right side of the bed, with

the thumb of the left hand pressing the child's left buttock to the right, while the fingers bring the right buttock towards and against it. With the right hand several strips of plaster of some two fingers' breadth are drawn from below upwards and outwards, overlapping one another across the buttocks from one trochanter to the other. The strips should approach the perineum as closely as possible. As a support to the plaster, a spica bandage of two or three fingers' breadth is run over the lower part of the body. A guttapercha or waxed paper covering can be used to keep the buttocks clean during defecation, and this bandage can be retained in position two or three weeks. If diarrhœa be present, astringent enemata may be employed, if constipation, laxative enemata, and these should be given by the physician himself, for fear of disturbing the bandage. The latter can be changed without difficulty when necessary.—*Phil. Med. Times, Dec. 7th, 1878.*

APHASIA IN CHILDREN.—A. Schwartz relates, in the *Deutches Archiv. für Klin. Medicin*, band xx, the case of a normally developed little girl 3 years old, who, during convalescence from an attack of measles, was suddenly seized with loss of speech and paralysis of the extensor muscles of the right arm. The right leg was unaffected. After a few weeks the paralysis improved, and the child learned to speak as if she had never spoken before. Considering the peculiarity of the manner in which speech was regained, Schwartz asks whether the right half of the brain did not gradually assume the functions of the left half, which had been impaired. Kuessner reports (*Archiv. für Psychiatrie*, vol. viii,) a case observed in the Polyclinic at Halle, of aphasia in a child 3 years old, who, without any apparent external cause, suddenly became speechless. She heard and understood everything, could move her tongue and limbs freely, endeavored to make herself understood by gestures, but could not speak. In a short time some improvement took place spontaneously, and she quite recovered after the administration of an emetic. Kuessner believes that the case was one of reflex aphasia, but leaves undecided the question of its origin.—*British Medical Journal, Sept. 28th, 1878.* W. E. F.

Editorial.

MEDICAL JOURNALISM IN THE UNITED STATES.[1]

With the year 1878 the two oldest medical journals of the United States complete each its fifty-first year of continuous publication. The *American Journal of the Medical Sciences*, (quarterly) three months the elder of the two, dates from November, 1827, and with the year 1879 begins its one hundred and third semi-annual volume.

The *Boston Medical and Surgical Journal* (weekly) first appeared February 19, 1828, and is now just entering upon its hundredth volume.

Next in age of the medical journals published in the United States,[2] and *the oldest of the medical monthlies*,[3] is the SAINT LOUIS MEDICAL AND SURGICAL JOURNAL. Founded in the year 1843, by the late Professor M. L. Linton, as a monthly, it was changed to a bi-monthly in its fifth volume, and retained this form until 1872, when it was again published as a monthly. With the exception of about two years of interruption, during

1. The suggestion of these editorial remarks is due to a carefully prepared statistical paper on "The Medical Journals of the United States." By J. S. Billings, Ass't Surgeon, U. S. A., in the *Boston Medical and Surgical Journal*, for January 2, 1879. The facts noted are taken mainly from that paper, and from the *Catalogue of the Library of the Surgeon-General's Office, U. S. A.*, compiled under the direction of the same author.

2. The *Western Lancet*, (monthly) begun at Cincinnati, in May, 1842, and published afterwards for a short time at Lexington, Ky., was absorbed in 1858, by the *Cincinnati Medical Observer*, (monthly) and the new name of *Cincinnati Lancet and Observer*, was adopted. The publication of this monthly continued until July 1, 1878, when it was merged in the *Cincinnati Lancet and Clin* [illegible] Thus the word "Lancet" has been retained continuously as a part of the title of a medical journal, for between thirty-six and thirty-seven years, but neither the main title nor the identity of the journal has been fully preserved.

3. The *Medical News and Library*, (dating from January, 1843,) issued for many years past to the subscribers to the *American Journal of the Medical Sciences*, can scarcely be included in the list of independent medical journals.

the late war (November, 1861, to January 1, 1864), its publication has been maintained with regularity, and its thirty-third annual volume was completed with the year 1877. Enlarged at the beginning of 1878, and again at intervals during the year, it outgrew the limits of its customary yearly volume, and now once more enlarged at the beginning of 1879, it promises to its subscribers twelve monthly numbers of one hundred and twenty-eight pages, in two half-yearly volumes of at least seven hundred and sixty-eight pages each.

Prior to 1843, the year of the establishment of the SAINT LOUIS MEDICAL AND SURGICAL JOURNAL, no less than SIXTY-SIX medical journals had been commenced in the United States, and of these fifty-nine, or all but seven, had ceased to exist; of the seven then living, but three survive, and only the two already noticed have maintained an independent and uninterrupted existence.

Since January 1, 1843, or during the life of this journal, one hundred and eighty-three medical journals have been born, and one hundred and thirty-seven are known to have died within the same period. Posting the account for the thirty-five years ending with 1877, the births exceed the deaths by thirty-five, showing an average increase in the number of journals published of one a year and making up a total of forty-two existing at the end of 1877.

Going back by periods of ten years we find the number of regular medical journals published in the United States, together with the number of births and deaths, to be as follows:

DECENNIAL PERIOD.	DIED.	BORN.	REMAINING.
1867 to 1877	61	46	42
1857 to 1867	50	50	27
1847 to 1857	42	34	27
1837 to 1847	29	19	19
1827 to 1837	23	24	9
1817 to 1827	20	16	10
1807 to 1817	7	5	6
1797 to 1807	4	0	4

The chances of a medical journal dying at its birth, that is of not passing beyond its first number, appear to be about 4 in 100; of dying at or before the end of its first year, about 37 in 100; of dying at or before the end of its second year, about 53 in 100. After this, as in human mortality experience, the death rate

diminishes, and the average medical journal enters upon, but does not complete its sixth volume. If its survives its first year it may be expected to enter upon, but not quite to finish its ninth volume, and if it survives its second year, it will probably enter upon, but not complete its twelfth volume.

For the causes of the great infant mortality of medical journals we need not to look far or search long. "The motive for the existence of the minor journals is not for direct profit but as an indirect advertisement, or—and this is more common—the desire to have a place in which the editor can speak his mind and attack his enemies without restraint." [4] New journals are every year started in the interest of individuals, medical schools and medical cliques, and such journals generally come to an early end as a result of the conviction attained through experience that the play is not worth the candle.

To establish a medical journal, money and labor must be freely as well as judiciously expended, and that steadily, and during a considerable period. Then, if the journal proves to be on the whole a good one, and suited to the needs of the average members of the profession, and if it is managed fairly well in its business department, it acquires a value which can be expresed in terms of dollars and cents, and even if its projectors get tired of their work, others will be found willing and eager to try their hands at the same task. Thus journals may change and do change in management and in character oftener even than would appear from the statistics of births and deaths; and this because an established name and subscription list has a recognized and undoubted market value, and can be sold presumably for what they have cost, if the purchaser gets tired of his often troublesome possession.

From changes and varying fortunes, such as have been hinted at, but one, and that the oldest of our medical journals, has been from the beginning free. *The American Journal of the Medical Sciences* has been singularly fortunate in steering clear of the rocks of error and bad management which have wrecked its nine contemporaries, and one hundred and seventy-three out of the two hundred and five journals since undertaken. Its long, prosperous and honorable career must be attributed first of all to the fact that it has been owned and published from the

4 Billings *op. cit.*

beginning by one and the same publishing house, and that the oldest, most prominent, and most successful of those engaged in manufacturing medical books. Thus intimately bound up with the other interests of its proprietors, it has been possible for this journal to obtain a very large and permanent list of subscribers throughout the whole extent of the United States and Canada, and even in Europe, and the profits directly and indirectly growing out of its publication have justified a uniform liberality of expenditure, both in the payment of salary to its editor and in compensation to all acceptable contributors, which have secured for it the foremost position among American medical journals, and an honorable rank among the leading medical publications of the world. Singularly fortunate in its permanent ownership and excellent business management, this journal has been equally fortunate in securing and retaining the able, conscientious and impartial service of its distinguished and venerable editor-in-chief, Dr. Isaac Hays, who has been connected with its fortunes from the beginning, at first as one of its staff of collaborators, and since 1838 as editor. *The American Journal of the Medical Sciences* stands a noble monument at once to the rare business sagacity of the great publishing house now represented by Mr. Henry C. Lea, and of the equally rare editorial ability and fidelity of Dr. Isaac Hays.

Somewhat in contrast to the great American quarterly has been the career of the *Boston Medical and Surgical Journal.* Established in 1828 as a weekly, by the consolidation of the *New England Journal of Medicine and Surgery,*(quarterly) which, under the changed name of *New England Medical Review and Journal,* had completed its sixteenth annual volume, and the *Boston Medical Intelligencer,* (weekly) which had been begun by Dr. J. V. C. Smith, in 1823, its first editorial staff included the distinguished names of Drs. J. C. Warren, Walter Channing and John Ware, and for a few years the new journal worthily sustained the high character of the old quarterly. In 1835, Vol. XI, the journal became the property of Mr. David Clapp, a printer, who succeeded in making it pecuniarily profitable and continued to publish it for a term of nearly forty years. During the first half of this long term, the editorial department was under the charge of Dr. Smith, who had formerly edited the *Intelligencer*; after this the changes in editors were very numerous, but the journal improved greatly in character and attained a rank among the

best in the country. The journal now bears the imprint of Houghton, Osgood & Co., and is understood to be conducted under the control and supervision of an association of physicians. Its present high character and deservedly large circulation have made the *Boston Medical and Surgical Journal* one of the most valued as well as best known medical publications in the English language.

Compared with these two representative journals of America it behooves us to speak with modesty of the journal which we have the honor now to conduct. Founded by the late Prof. M. L. Linton, in 1843, and conducted mainly by him until the end of 1867; its successive title pages bear in addition the names of Drs. W. M. McPheeters, V. J. Fourgeaud, J. S. Moore, Jos. N. McDowell, J. B. Johnson, E. Deming, J. R. Allen, F. W. White, J. W. Clemens and G. Baumgarten. With the beginning of 1868, the JOURNAL became the property of the printers, Messrs. R. P. Studley & Co., with Dr. G. Baumgarten as editor, and, for the four years next suceeeding, it was conducted with an ability and good judgment which have seldom been surpassed in the history of American medical journals. Unfortunately, however, the publication of a medical journal was not in harmony with the other interests of the publishers, and at the end of 1871, the JOURNAL passed by sale into the possession of Drs. Wm. S. Edgar and H. Z. Gill, who conducted it jointly for about one year, after which it became the sole property of Dr. Edgar, by whom it was published, and in the main edited, until the end of 1877; during a part of this time the name of Dr. D. V. Dean was associated with that of Dr. Edgar, as editor. During these latter years the circulation of the JOURNAL did not increase, perhaps scarcely held its own, and at the beginning of 1878 its number of paying subscribers had fallen below four hundred. Incapacitated through failing health for severe or protracted labor, Dr. Edgar made several attempts to transfer the JOURNAL to other hands, at one time procuring the incorporation of a stock company for that purpose, an effort which failed for the time, but which appears, nevertheless, to have borne fruit in the recent organization of a publishing association upon substantially the same plan. Passing, with the end of 1877, into the possession of its present proprietors, it was found to be a matter of the first necessity to increase the circulation o the JOURNAL in order to avert possible death from inanition,

and here the value of an established name and honorable past history as an element in journalistic success was shown in the very rapid and gratifying increase of the subscription list, which was secured by giving ordinary attention to this part of the work. This increased circulation, attracting the notice of intending contributors, led to a corresponding increase in the number and improvement in the quality of papers offered for publication, and long before the end of the year made it possible to secure for the editorial department the cordial and efficient coöperation of a large and able corps of collaborators.

The JOURNAL has now entered upon its thirty-sixth volume, more than doubled in size as indicated by the number of pages and trebled in actual contents, and with a steadily-growing circulation which already exceeds two thousand copies. The success thus far attained is the best evidence we can ask of the appreciation of our efforts by the great mass of the profession in our own and the neighboring States, and we confidently hope, by steadfast efforts in the same direction, to earn for the SAINT LOUIS MEDICAL AND SURGICAL JOURNAL a good name which shall abundantly satisfy the requirements of all reasonable persons, whether subscribers or contributors.

AMENITIES OF MEDICAL JOURNALISM.

In the issue of the *Boston Medical and Surgical Journal* for January 9, there appeared a letter devoted mainly to the subject of the regulation of prostitution, but with a tail-piece puffing a medical journal association which was at that very moment in the throes of parturition. The indelicacy of the puff was thinly concealed under the transposed initials of the assistant editor of the much-lauded, unborn journal, and was, if possible, aggravated by a very uncomplimentary reference to the medical press of St. Louis. To such of our readers as may happen to have seen or heard of this letter it may be a comfort to know that this act of the writer is disavowed by those who are officially put forward as "responsible for the editorial and reportorial management" of the journal in which he is interested, and also that

he has taken occasion personally to call on us and kindly to assure us that his strictures do not and were not intended to apply to the ST. LOUIS MEDICAL AND SURGICAL JOURNAL under its existing management, but only to it as it had been at some past time and when it was in other hands. "Self-praise goes but little ways" says the homely proverb, and we feel sure, also, that unprovoked and wholesale disparagement of the presumably honest efforts of competing journalists will in the end injure rather than aid the particular undertaking thus indiscreetly advertised. We do however complain, and we think with reason, of a want of due vigilance upon the part of our esteemed Boston contemporary in allowing its pages to be used by a correspondent to say things which it would scorn to say itself to the discredit and possible injury of a sister journal. By a courteous and unsolicited disavowal of the sentiments expressed by its correspondent, and by a cordial and appreciative recognition of our own efforts, the *Boston Journal* has set itself right so far as it is possible for it to do so; but it is still true that when mud is freely thrown around a portion of it will hit somewhere, and in the present instance, we have reason to believe that the interested and improper expressions of the correspondent are being disingenuously used in the supposed interest of the journal in whose behalf they were written, and to the possible detriment, with its patrons, of the ST. LOUIS MEDICAL AND SURGICAL JOURNAL. We allude to this matter even at the risk of appearing over-sensitive to trifles, for the reason that improper communications are but too frequently offered to medical journals for publication, and only by constant vigilance can the concealed venom be detected, and the poisoned arrow turned from the intended victim.

AN editorial salutatory in a new local exchange touching upon "that hackneyed of all themes, elevation of the standard of medical education," appears to us to call for a timely word of comment. Is the editor so dazzled by "the radiance rising over the eastern hills" that he has overlooked the praiseworthy and very successful efforts of the St. Louis Medical College to establish a course of study covering three full years? This is "the most unkindest cut of all" when we remember that the exchange in question has sought strength through the

use of the names of gentlemen connected with the school thus slighted. A journal that claims to be "the organ of neither clique nor school" should take heed lest by ignoring the honest efforts of any school in the right direction, it assume a virtually partisan attitude in discouragement of a cause which it professes to have at heart.

Again, is it quite in the best taste to tell the profession from which a medical journal seeks its support that it "is greatly wanting in high culture, in a thorough knowledge of the most advanced facts of medicine, in strict ethical conduct of its members," etc., even though the editor expresses his conviction that "medical journals are most potent to remedy these ills?" And is the matter helped much by reminding his medical readers of the shortcomings of the other learned professions? It occurs to us that ethical practice is, after all, the most effective ethical preaching, for were not the streets of Jerusalem kept clean by each man caring for his own doorway? And, after all, who are the wise and judicious purveyors by whom "the greatest extent and variety of information will be furnished, and that too, of the latest and most advanced views entertained, both in this country and abroad, distinguishing, especially, the true from the false, the good from the bad." Are not their names all upon the advertising sheets at the end of the number?

Having somewhat hastily glanced over the contents of the same number, we notice a communication to which we feel it to be our duty to call the attention of the responsible "Executive Committee," viz.: an alleged correction of certain statements occurring in an article contributed to this journal in September of last year. In this connection, we beg leave courteously to suggest that a correction, to do the most good, should be made in such a way as to reach as many as possible of those who may be presumed to have read the journal in which the article originally appeared. We are always ready, in the interest of truth and justice, to publish a correction of any statement made in our JOURNAL, which is believed to be inaccurate or injurious, but we hold it to be a good and wise rule invariably to refuse to admit communications in correction of alleged errors of fact as reported by writers in other journals, except only in cases in which the opportunity to publish such correction has first been offered to and has been declined or neglected by the journal in which the statement to be corrected has appeared.

THE PLAGUE.

John W. Draper, in his work, "Intellectual Development of Europe," says: "The assertion is true that the Old World never recovered from the great plague in the time of M. Antonius, who brought it with the army from the Parthenian war. In the reign of Titus ten thousand persons died in one day in Rome."

The permanent home of this disease seems to be east of the Mediterranean. It visited Western Europe in the 15th, 16th and 17th centuries. In 1710 it destroyed one-half of the population of Marseilles, but seems to have been limited to Turkey, Egypt, Anatalia, Syria and Greece, sometimes extending north toward, but not touching Russia, and west to Malta. It seems to be unknown in tropical climates, and cold weather in northern climates seems to have checked its ravages. In the great plague in London in 1665 the deaths in June were 590; in July, 4,129; in August, 20,046; in September, 26,430; in October, 14,373; in November, 3,449; in December less than 1,000.

The *Wiener Medicinische Wochenschrift*, of late date, says that the appearance of the plague in Russia excites general attention. Russia expresses great confidence that it can confine the disease to its present location. It is high time that this should be done, as, according to the latest news, it has reached Nischnei Novgorod. The telegraph announces that it has nearly reached the walls of Moscow, if it is not already within that city. Whether later investigations will decide that it is feberis recurrens, typhus exanthematicus or bubo plague does not change its aspect. The facts are that it is a terrible epidemic, and has more than decimated the population of Astrahan. The official reports from Russia show that in one place where 190 persons were afflicted between the 1st and 5th of January, 140 died before the 10th.

The *St. Petersburg Med. Woch.* charges the government with trying to suppress the idea that the disease is the plague, by calling it in its official dispatches "croupous inflammation of the lungs, typhous inflammation of the lungs." The sudden death of Dr. Morosow, who had been sent to the infected district, is attributed to "pneumo-typhus, a disease long ago excluded by science." It gives parts of the report of Dr. Depner, the medical director of the Cossacks of Astrahan, who has observed the devel-

opment of the disease from November 7 to December 14. He says that Dr. Koch and himself, from December 5, when the disease became more malignant, "tried various remedies, as salicylic acid, salts, quinine, cold atmosphere, in fact, every known remedy;" that all of them had little or no effect, *nearly all the patients died.*

The entire medical attendants, Dr. Koch and six assistants, became victims of the epidemic; the priests died; the Cossacks died, even those who carried away the dead died. Nearly all who came in contact with the sick died, although all were provided with every known protection under sanitary rules. They took the disease within three to six days. He stated that, in his judgment, quarantine is the only protection. "In milder cases of open abscesses of the glands, poultices of carbolum, and before opening, mercurial ointment had some good results." He claims the right, from his observation to call it a "very malignant typhus or a peculiar human pest (menschenpest—*Pestis Indica*, Hirsch) or a new disease, between pest and typhus." The symptoms are, "sudden attacks of palpitation; uncertain pulse; vomiting; dizziness; difficult respiration; spitting blood; vomiting thin blood; pale face; apathic expression; glassy eyes, sunken in; enlarged pupils; then three or four hours of extreme weakness, followed by great heat; lethargy; slight delirium; suppression of the urine; costiveness; excrements, if any, dark brown. Death follows after the first or second, seldom after the third paroxysm, with symptoms of clonic contractions while in a comatose condition, with rapid declension or loss of strength." He concludes by stating it as his opinion that the cold weather ought to confine the disease to its present locality.

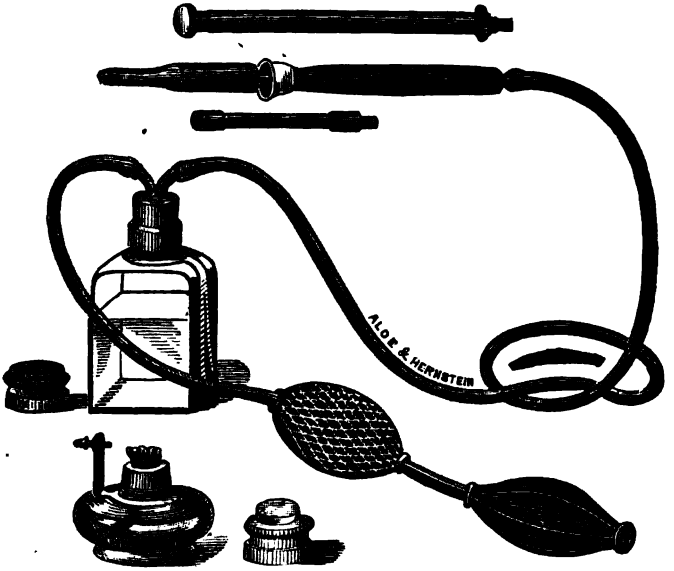
According to the last reports, it is still spreading, and has reached the Ægean Sea, one of the avenues of the commerce of the world, and through this it may be brought to us at any moment. Prof. Jacobi, head of the medical commission sent to examine it, has taken the disease. As we have no national quarantine regulations to prevent its introduction, should it come, the profession will have to fight it single-handed and alone; therefore we deem it our duty to now call attention to it, and to the fact that it has already passed its usual boundaries.

New Instruments.

DR. PAQUELIN'S THERMO-CAUTERY.

[Although this instrument is not a very new one, yet its construction has not been well understood, hence this insertion.]—ED.

It is known that the platinum and some other metals possess the property, when slightly heated, of becoming incandescent when brought in contact with a gaseous mixture of air and of certain hydrocarbon vapors, and of continuing in an incandescent state, without flame, as long as the mixture continues to be supplied. It is upon this property that Dr. Paquelin has based the construction of his novel and very admirable apparatus. It is composed of the principal parts: First, a combustion chamber; second, a reservoir for the volatile hydrocarbon; third, an air-supplying bellows, with its tubes and connections. This may be operated conveniently, either with the foot or the hand. The outer surface of the combustion cnamber is the Cautery proper. It is attached to two concertion tubes. Through the inner one the gaseous mixture is supplied, while the products of combustion escape through the outer one. Two forms or tubes adapted to simple surface or deeper cauterization, division of tissues, etc., are furnished with each apparatus. A tubular, non-conducting handle and a lengthening tube may be used together or separately, as may be found convenient in certain operations. The reservoir may be



readily secured to the button or buttonhole of the operator by means of a two-branched hook attached to the metallic neck, thus leaving one hand, or, if the bellows are worked by the foot, both hands of the operator free for the principal manipulations. A spirit lamp for the initial heat is included with the apparatus. Closely-fitting metallic caps are provided for the hydro-carbon reservoir and for the spirit lamp. The reservoir will contain enough of the hydro-carbon to last for three hours or more of continued work.

Book Notices and Reviews.

DISEASES OF THE BLADDER AND URETHRA IN WOMEN. By ALEXANDER J. C. SKENE, M. D., Professor of the Diseases of Women in the Long Island College Hospital; Fellow of the American Gynæcological Society; Corresponding Member of the Gynæcological Society, of Boston; Member of the Medical Society, of the County of Kings, and of the Obstetrical Society of New York.

This is a handsome volume of 362 pages, illustrated with thirty-six woodcuts, and mechanically executed in every particular with the usual good taste of its publishers, Wm. Wood & Co., 27 Great Jones Street.

It is a concise, systematic, practical work, in a department of ample breadth, interest and utility, and one too, in which knowledge has recently been greatly augmented; but whose progress and significance has hitherto been neglected by English authors. Those brought into frequent contact with the diseases of women have felt this neglect most keenly and must greet the publication of this book with satisfaction. It evinces the author's thorough acquaintance with his subject, sustains his reputation as a candid, careful, observer and its valuable contribution to the physical exploration of the female bladder and urethra, attest his ingenuity.

The anatomy, the function, the development and the malformations of the bladder and urethra, their functional and organic diseases, together with neoplasms and foreign bodies in the bladder and urethra, and displacements and dislocations of these organs, are agreeably discussed in didactic lectures; the style being generally clear and succinct. A complete text-book is thus formed, in which the etiology, pathology, symptomatology, diagnosis, and treatment of each morbid condition referred to, is conveniently examined under separate heads.

Some of the author's opinions are adverse to those of the reviewer; but if criticism was not out of place in a field where knowledge is often indefinite and rules of practice are still unsettled, the intrinsic merit of the work is such that it deserves only praise and we feel no disposition to single out minor faults. Precise diagnosis in this class of affections is frequently disregarded and disease maltreated. These errors have resulted more from a want of access to necessary information, than from a lack of conscientious zeal in physicians, and by compiling in an accessible form, what is known of the pathological conditions of the female bladder and urethra, and adding thereto his own experi-

ence, Dr. Skene has rendered the profession a real service, while the meager information on this subject heretofore within the reach of busy practitioners will command for his book the place it should fill in every library. We confidently commend it to our readers, convinced that its perusal cannot fail to mingle profit with pleasure. W. L. BARRET.

DIPHTHERIA; ITS NATURE AND TREATMENT, VARIETIES AND LOCAL EXPRESSIONS. By MORELL MACKENZIE, M. D., London, Senior Physician to the Hospital for Diseases of the Throat and Chest, Consulting Physician to the Northeastern Hospital for Children, and Lecturer on Diseases of the Throat at the London Hospital Medical College; pp. 104. [London, J. & A. Churchill, 1879.]

DIPHTHERIA; TREATMENT OF. BASED UPON A NEW ETIOLOGY AND PATHOLOGY. By WILLIAM C. REITER, A. M., M. D., of Pittsburg; pp. 47. [Philadelphia: J. B. Lippincott & Co., 1878.]

The classical work of Dr. Mackenzie leaves little to be wished for; it is at once concise, complete and candid. The author does not burden his text, so much as too many mere writers do, with useless verbiage and rhetorical reiteration, but here, as always, speaks with that clear-cut directness that betokens at once the student and the master. He goes far back to the Sanscrit writings of D'Hanvantare, about 582 B. C., for the first recorded description of diphtheria, and traces its history down to the literature of to-day. The exciting cause is a specific contagium, while tender age is the predisposing cause, together with such accidental conditions as pharyngeal catarrh or diseases which lower the system. The poison may be received either by direct implantation, through the circumambient air, through the food or water, and possibly by inoculation. After dealing with the etiology of diphtheria, the author considers the symptoms, classifying the different forms as typical, mild or catarrhal, inflammatory, malignant, gangrenous and chronic. Under these headings every phase of the disease is considered in terse paragraphs. Two short chapters on the paralysis and diagnosis of diphtheria, and then comes a most important one relating to pathology. The dictum of Oërtel and Eberth that without bacteria no diphtheria is met point blank by the statement that what these authors have described as spherical bacteria are only the spores of the leptothrix buccalis, common in ulcerative and aphthous stomatitis, and are mainly found in the superficial layer of the diphtheritic membrane. The pathological changes in the lungs, heart, brain, kidneys and in the glandular system from secondary infection are also discussed in turn.

In considering the treatment of these cases, the remedies are divided according to their action, thus: Recuperative agents, the alleged specifics, the antiseptics and the expectorants. Specifics,

however, find no favor with our author, the indications being more in the direction of assisting the natural processes and preventing systemic infection. In the local treatment there is much to be done to limit the formation and remove, without violence, the false membrane. Detached pieces may be carried away by a brush, blotting paper, or absorbent cotton, pressed on that that remains, and, when it is freed from moisture, an astringent (iron) or solvent (saccharate of lime or lactic acid) applied. If there is much fœtor it may be prevented by antiseptic sprays or gargles; tumefaction controlled by the external and internal use of ice, while if the membranes are very thick and tenacious, and it is impossible to check the exudation of lymph, steam and hot fomentations are useful to convert the inflammatory process into a suppurative one.

To sum up the indications for treatment, the author gives a typical case and the precise mode of conducting it which has proved worthy in his experience. An interesting chapter is the one devoted to "Laryngo-Tracheal Diphtheria, Formerly Called Croup." Those who hold to the antiquated ideas of the non-identity of croup and diphtheria had better pass this part of the work, as a careful reading cannot but make their position seem uncomfortably questionable. It is first shown that the pathological differentiation of the phenomena of these presumably distinct diseases must be abandoned. Then, with regard to the clinical difference, it is fair to say that when they are thoroughly examined there will be many converts to this somewhat new doctrine advanced chiefly by the author and his compeers. Tracheotomy is indicated as soon as it is found impossible to relieve asphyxia by any other means, and in this event there should be no delay. This is one of the few books for which there must be a general demand.

The main idea in Dr. Reiter's brocheur is that diphtheria consists in excess of fibrin in the blood, originating in an impaired function of the portal system, which calomel, boldly and freely given, will restore. The Doctor gives from three to ten grains every hour until the intestinal discharges are gelatinous and of a dark green hue. There is no risk of pytalism in diphtheria before there is this change in the dejections. A number of successful cases are quoted. The author's style is not by any means concise, but his suggestions are worthy of investigation.

WILLIAM PORTER.

UEBER EINEN FALL VON REFLEXSCHWINDEL AUS BISHER NICHT BESCHRIEBENER URSACHE, von DR. A. ERLENMEYER. [Separatabdruck aus der *Deutschen Medicinischen Wochenschrift.*]

A CASE OF REFLEX VERTIGO DUE TO A CAUSE HITHERTO NOT DESCRIBED. By DR. A. ERLENMEYER. [Reprint from the *Deutsche Med. Wochenschrift.*]

In the reprint before us the learned editor of the *Centralblatt für Nervenheilkunde* describes a distinct variety of vertigo, which, if heretofore known, has not found its way into the journals, or into the text-books on nervous diseases. Hitherto only two distinct varieties of that large group of cases of sympathetic or reflex vertigo have been recognized, namely: stomachic vertigo, a condition of giddiness, hallucination nausea, headache, etc., without loss of consciousness, and dependent upon reflex excitation of the cerebral vessels from some visceral irritation (Hamilton on Nervous Diseases), and the labyrinthine form due to disease of some part of the central auditory apparatus. In our author's case the vertigo was due to a strictured urethra; the stricture was relieved, and the patient cured.

The following is a condensed history of the case: T. L——, æt 31; single; no inherited tendency to vaso-motor disturbances; of temperate habits. Has always enjoyed good health; had gonorrhœa several years ago. His present sickness began five or six years before he came under observation. At first there was a sensation of weight and stiffness in the left arm; it seemed to him as though a heavy weight had been attached to his arm. The same phenomenon soon appeared in the left leg. Sometimes this attack came on whilst walking, and he was then obliged to stand still; during the attack the leg became heavy, and he lost all control over it. Finally the right arm was attacked in the same way; the right leg was never attacked. In the course of time these attacks came on more frequently and with greater vehemence, and they were accompanied by other symptoms; among these may be mentioned a sense of pressure over the frontal region and vertigo. The former remained almost constantly, whereas the latter made its appearance during the attacks in the extremities. No hallucinations; no loss of consciousness; no nausea or vomiting. The dizziness occurred without the other symptoms, but only during micturition. Owing to the stricture, the flow of urine is somewhat retarded; sometimes considerable time elapses between the beginning of the intention to urinate and the actual flow of the urine. During this interval the vertigo is most marked; it disappears when urination begins. Gradually the patient became nervous, irritable and sleepless, and unfit for continuous mental labor; at one time the patient was very melancholic, and had suicidal tendencies. The stricture was treated by the introduction of bougies; it was cured, and with it the vertigo disappeared.

There can be no doubt that the vertigo was dependent on reflex irritation due to the urine forcing its way through the narrowed urethra. The relationship between irritation of the genitals and central vaso-motor disturbances is now generally known, almost every practitioner having had one or more cases under his own observation, vide proceedings of St. Louis Medical Society, pp. 206 and 207, THE JOURNAL, December, 1878.

It will not, in view of this most interesting case, reported by a reliable, trustworthy observer, be amiss in future to examine cases of vertigo, not assignable to any cause for stricture, and in case of its detection, of course measures for its relief should be at once instituted.

The profession owes many thanks to Dr. Erlenmeyer for his really valuable contribution to a branch of pathology, in which, in spite of the great progress made of late years, there remains as yet much to be solved. F. J. LUTZ.

HABITUAL DRUNKENNESS AND INSANE DRUNKARDS. By JOHN CHARLES BUCKNILL, M. D., London; F. R. S., F. R. C. P.; Late Lord Chancellor's Visitor of Lunatics.

We have not the time at command to notice this book as its merits deserve. Every physician and philanthropist should read it. It draws the line sharply between intemperance as a vice, its most common form according to the author, and as a disease—its infrequent variety.

Dr. Bucknill is the joint author of Bucknill and Tukes' Manual of Psychological Medicine and is one of the most eminent alienists in Europe.

He thinks that "physicians ought not to be fanatics" on the subject of alcohol, and is "afraid members of the profession are taking hold of the stick by the wrong end, in considering drunkenness not a cause of disease, but as a disease in itself," which, to his mind, is a very great mistake.

The new book is the offspring of a controversy sprung up in London, while the habitual drunkark's bill was pending in Parliament, as to whether drunkenness was a disease. Dr. Bucknill maintained that while the appetite for drink in some cases is inherited, drunkenness is generally a vice and not a disease. His arguments on this head provoked a number of sharp criticisms in Parliament and out, and he replied as sharply. His letters have been collected in the volume before us. Published by Macmillan & Co., and for sale by the St. Louis Book and News Co.

Dr. Bucknill has visited nearly all the inebriate asylums in this country, and he believes that with the single exception of a reformatory in Philadelphia which does not pretend to cure drunkenness, they are all fraudulent or inefficacious, or both. In most of them, he learned from personal observation, the patients could and did obtain as much liquor as they desired. In some

instances, patients were detained unjustly to promote the designs of their relatives upon their property; in others the restraint upon them was merely nominal, but in all, the evidences of improvement were wanting. "My own impressions of the inebriate asylums in America," writes Dr. Bucknill, "are most unfavorable. I believe the treatment of habitual drunkards for the cure of their supposed disease to be unsound from top to bottom, and everywhere. I make no exception. * * * The State Inebriate Asylum at Media has been suppressed because it was said to be a failure. The New York Inebriate Asylum at Ward's Island has been ordered to be suppressed for the same reason. The Government at Albany has consented to give the Binghampton Asylum a trial for one more year, after which time, unless it redeems its character, the building is to be devoted to other purposes." The Governor of New York has since pronounced Binghamton a failure and recommends its conversion into a lunatic asylum.

Dr. Bucknill states that "in Ireland it has been the practice to detain habitual drunards in lunatic asylums," and that the commissioners in 1872, said "it would not be easy to point out a single case of reform."

He says the Franklin Home for the Reform of Inebriates, at Philadelphia, "does not please the coterie of inebriate doctors, because it does not conform to their dogma that drunkenness is a disease to be cured and not a vice to be reformed."

This is a bold and severe arraignment of the doctrine that inebriety is the result of disease and of American experiment at curing instead of reforming inebriety.

But there are two sides, as well as a middle ground, upon this subject, and we are inclined to think that truth and safety lie between.

Asylums for the voluntary residence and treatment of inebriates are no better than tapering off or sobering up stations, or, as some of their inmates told Dr. Bucknill, capital places to pick up in after a debauch, but to call them reformatories, and to annually parade before the public a list of sobered up drunkards and call them reformations, is a fraud upon the philanthropic spirit of the age which, overflowing with charity, really desires to rescue the inebriate from destruction.

As hospitals alone they are doomed to ignominious failure, as reformatory hospitals they may be made a success, for inebriety is both a disease and a vice. In some it is all vice, in others all disease, in many both vice and disease combined.

Disease leads to inebriety, as we see in hereditary substitution of inebriety for mania, as we see it following sunstroke and cranial injury, and at the catamenial period of women, and inebriety, in time, entails disease; *directly* in the damaged brains, hepatic, gastric and gangliopathic diseases of its victims and *indirectly* in epileptic, idiotic, imbecile, insane and otherwise de-

generate offspring, though the real dipsomania, whose mania is a periodic and a motiveless impulse to drink, as Dr. Bucknill maintains, is a *rara avis*.

Inebriety is a moral, a medical and a legal question. The drunkard has rights which the law is bound to respect, and so likewise have those dependent upon him for maintenance. If he does not outrage public decency or squander the substance of his wife and children, or others having lawful claims upon him for maintenance, it is difficult to see how he can be deprived of his liberty.

On the other hand, if by reason of perpetual inebriety, a man fails to give the wife and children the support he is bound in law to give, he should be made to do his duty to those dependent upon him. He should not be allowed to evade his moral and legal obligation by pleading that he is diseased and can not help drinking.

The State should provide reformatory hospitals to treat whatever of disease the drunkard may have, and opportunities for labor, that the drunkard, by enforced sobriety, after the removal of all the physical consequences of drink, might be compelled to earn his own livelinood, and to contribute to the support of his family and the reimbursing of the State for his board and medical treatment.

The habitually besotted drunkard should be disfranchised as much as a lunatic, imbecile or idiot, and he should not be permitted to marry and beget a generation of epileptic, imbecile or idiotic children to fill the jails, alms-houses, asylums and penitentiaries of the land.

Dr. Bucknill advocates the punishment of all overt acts on the part of drunkards, "especially the act of public drunkenness, which is a kind of indecent exposure, also failure through drunkenness to maintain children, and indeed all drunken conduct which invades the rights of others." The remedy he suggests is "a penitentiary for habitual offenders, in which they should be compelled to earn their maintenance."

Dr. Bucknill refers to the conversion of the Inebriate Asylum of Upper Canada into a lunatic asylum, and quotes Dr. Conrad, of the Maryland Insane Asylum, where one ward was devoted to inebriates, as saying "he did not know of a single case where a cure had been effected by confinement."

No one can read Dr. Bucknill's book without feeling that there are certainly two sides to the subject he discusses; and, while he is undoubtedly correct in his strictures upon the recent tendency to over-estimate the disease element in the causation of inebriety, we think he takes too little account of the attendant disease (though he admits it) and the aid the drunkard may receive from judicious medical treatment towards effecting his reformation, if he really makes up his mind to reform.

An experienced physician, thoroughly versed in the princi-

ples of practical medicine, can materially assist those who will to reform. Here, as elsewhere, where there is a will there is generally a way. That way is not in seeking the companionship of other broken-down inebriates, who have gone to an inebriate's home as the ship out of the storm goes to the docks for repairs, but in refraining from evil communications and substituting, under the advice of a physician, judicious treatment for renewed potations to allay the persistent cravings of a depraved appetite.

C. H. HUGHES.

THE TESTIMONY OF MEDICAL EXPERTS. Annual Address of W. H. PHILLIPS, M. D., Kenton, Ohio.

This address is an able presentation of some of the intricate and sometimes vexed questions which attend the production of scientists as experts in courts of justice, to give their professional opinion on matters which "lie beyond the scope of the observation, knowledge and experience of men in general," a subject discussed in various contributions in Vol. XXXIV, January to July, 1878, of the ST. LOUIS MEDICAL AND SURGICAL JOURNAL. The improvement sought to be brought about by the address is the same, which has been advocated in this journal, namely, a law similar to France and Germany, the reasons advanced similar and excellent.

Dr. Phillips speaks as Chairman of a Committee of the Ohio State Medical Society, appointed to investigate this subject, and he shows great learning and impartiality.

The recommendations embrace "that the present law tends to bring scientists as experts into disrepute; the State should provide for competent scientists as experts, to be secured by rigid examination; to be appointed for life; to be officers of the State (meaning the court), and to be well paid; that there be a department of State medicine; that until the law is changed all members of the medical profession decline pay from the parties litigant, present their bill to the court, and ask that it be taxed and collected as costs."

We append some extracts:

"The magnitude of the matters at stake show the necessity of having highly intelligent and skilled experts to investigate these questions properly. * * A quack and a physician may be called to testify as experts," the quack advertising himself with brazen impudence here as everywhere else, lays down his principles, *ex-cathedra*, as true. The physician, aware of the difficulty of acquiring special skill in a science of such immense scope as medicine, perhaps hesitates or is uncertain. One result has been the establishment of the legal and popular presumption, that every physician is by virtue of his profession a medico-legist, and competent to testify as an expert in all branches of medicine."

"Properly speaking, medico-legists only are medical experts.

A man may be the leading physician in his State, and yet not be competent for such an office. It requires a special training, which the State should provide. Hence it is that this testimony has fallen into disrepute, because the law provides no means of winnowing the chaff from the grain. This confusion between the office of expert and physician has long been to the profession a matter of annoyance and chagrin." A striking illustration of the Ciceronian maxim, that "there is no theory so absurd but that some expert may be found to maintain it," he illustrates by a recent trial, and might have cited the Hammond-Grissom controversy.

"Lord Campbell says that skilled witnesses came with such a bias on their minds to support the cause in which they are embarked, that hardly any weight should be given to that evidence, and cites Chief Justice Chapman, of Massachusetts, Judge Davis, of Maine, and Judge Redfield, of Vermont, as having given expression to similar opinions."

He then eulogizes the system of Germany as the best on the subject.

It will repay every physician and attorney to peruse the above address in connection with the series of articles in the JOURNAL, above referred to. F. T. LEDERGERBER.

DR. HOUTS' PHYSICIAN'S JOURNAL, CREDIT-BOOK AND LEDGER. Second Edition. St. Louis, January, 1879.

This form of daily journal, credit-book and ledger, is the very best that we have seen. The whole account of each family is kept on the two pages that are seen when the book is opened. The name of the head of the family is placed on the head line of both these pages; on the left hand page is recorded the accounts of the accouchments; the treatment for diseases of the womb; the surgical practice and the special charges; on the right page is recorded the visits made in the line of general practice. On this page is carried out all credits and debits, so that at a half minute's notice the whole account may be ascertained. It is so arranged that an acconnt may be opened in any month of the year.

The price of the book will be saved in the first six months of its use, on account of the accuracy and simplicity with which the accounts may be kept. Price, 700 page book, $7.00; 500 page book, $6.00; 400 page book, $5.00.

ESSENTIALS OF CHEMISTRY, INORGANIC AND ORGANIC. For the use of Students in Medicine. By R. A. WHITTHAUS, A, M. M. D., Professor of Chemistry in the Medical Department of the University of Vermont. [New York: Wm. Wood & Co. 1879. 16 mo. pp. 257.]

In this little volume the author has omitted all topics which are not essential to an understanding of these chemical problems

that have a direct bearing upon the practice of medicine; more attention has been directed to the chemistry of the therapeutics than to that of pharmacy, while physiological chemistry, which must now be regarded as one of the most important foundations of rational medicine, has been treated of as fully as the limits of the book will permit. He has adopted the modern system of notation. Weights and measures are given in the metric system; temperature in the degree of centigrade scale.

The plan of the book is peculiar. It is made up of 1024 questions and answers; in this way information is imparted in the most concise, yet most impressive manner.

HARVEY AND HIS DISCOVERY; By J. M. DA COSTA, M. D., Professor of the Practice of Medicine at the Jefferson Medical College, Philadelphia, pp. 57. (J. B. Lippincott & Co.: Philadelphia, 1879.)

This little volume consists of an address delivered on Harvey at the opening of the Jefferson Medical College. The author's source for information was from Harvey's own works, for scattered through them, in prefaces, in notes, and in the text is much that shows his manner of thought, his feelings, and even his moods. This very interesting little work is neatly gotten up by the publisher.

NOTES IN THE TREATMENT OF SKIN DISEASES. By BOBERT LIVEING, A. M., M. D., Cantab, F. R. C. P., London. Lately Physician and Lecturer to Middlesex Hospital and Physician in Charge of the Skin Department. Fourth Revised and Enlarged Ed. 12 mo. pp. 123. (New York: Wm. Wood & Co. 1878.)

THE CELL DOCTRINE; Its History and Present State. For the Use of Students in Medicine and Dentistry; also a copious biography of the subject; by JAMES TYSON, M. D. Second edition, revised, corrected and enlarged (illustrated) pp. 202. Philadelphia: Lindsay & Blakiston, 1878. (Gray & Baker Book and News Co., $2.00.)

(Will be reviewed by Dr. H. Christopher in the next issue.)

HAND-BOOK OF NURSING FOR FAMILY AND GENERAL USE. Published under the direction of the Connecticut Training School for Nurses, State Hospital, 16 mo. pp. 266, New Haven, Conn. (Philadelphia: J. B. Lippincott & Co., 1879.)

This is the very best work on the subject that we have ever seen. Physicians should recommend it to their nurses.

HOW TO BE PLUMP, OR TALKS ON PHYSIOLOGICAL FEEDING. By T. C. DUNCAN, M. D. 16 mo. pp. 60. (Chicago: Duncan & Co. 1878.)

The author's task is too great to be performed in so small a book. The style may be "taking" with his patients, for whom

it is evidently intended, but the farther a physician gets into it the less he will think of it.

MEDICAL CHEMISTRY. Including the Outlines of Organic and Physiological Chemistry. Based in part upon the Riche's Manual of Chimie. By C. GILBERT WHEELER, Prof. of Chemistry in the University of Chicago, etc. 12 mo. pp. 424. Philadelphia, Lindsay & Blakiston, and Chicago, L. J. Wheeler, 1878. [St. Louis Book and News Co. $3.00.]

The author in his preface calls his work, Outlines of Chemistry. He assumes that his readers have previously made themselves acquainted with organic chemistry as taught by some recent author, or have become familiar with the general principles of modern chemical philosphy; for this reason he does not encumber the book with that which appertains to the theory of chemistry in general. We are pleased witl the book.

THE PRINCIPLES AND PRACTICE OF SURGERY. By JOHN ASHURST, JR., M. D., Professor of Clinical Surgery in the University of Pennsylvania; Surgeon to the Episcopal Hospital, and to the Children's Hospital; Consulting Surgeon to St. Christopher's Hospital, and to the Hospital of the Good Shepherd, etc. Second edition, enlarged and revised, with 542 illustrations, pp. 1040. Philadelphia: Henry C. Lea, 1878. Cloth, $6.00; leather, $7.00.

MODERN MEDICAL THERAPEUTICS; a Compendium of Recent Formulæ and Specific Therapeutical Directions from the practice of eminent physicians, American and foreign. By GEO. H. NAPHEYS, A. M., M. D., etc. Sixth edition, enlarged and revised, pp. 607. [Philadelphia: D. G. Brinton, 115 South Seventh street. 1879.]

(We have quite a number of books on hand, which we will notice more fully in our next.)

News Items.

Dr. Jacob Bigelow, of Boston, died on the 10th of January, aged 91 years. He was the oldest member of the Massachusetts Medicial Society. He graduated from Harvard in 1806.

Dr. John B. Biddle, Professor of Materia Medica and Therapeutics at the Jefferson Medical College, is dead. We understand that Dr. Laurence Turnbull is a candidate for the vacant chair. As we know that he would fill the place with satisfaction to both students and faculty, we hope to hear of his success.

The *Deutsche Zeitschrift für Thier Medicine* announces that of a quantity of American hams (1250) recently imported into Germany, many were strongly infected by trichinæ. This being the case, we would venture a wager that, although American, the hams were cured by Germans.—*Boston Med. and Surg. Journal.*

We, also, would venture a wager that the young man who composed the last sentence in the above paragraph thinks that Germans are as liable to rub trichinæ into hams as they do salt!

There are several new journals seeking support. We have room in this issue to mention the following:

The Physician and Surgeon, V. C. Vaghan, M. D., Ph. D. and, A. B. Palmer, M. D., A. M., editors; published at Ann Arbor, Mich, pp. 44. The editors say that it is not their object to supplant any existing journal. We wish them success. There should long ago have been a medical journal at Ann Arbor.

No. 1, Vol. I of the *American Journal of Otology*, a quarterly journal of physiological acoustics and aural surgery, is placed on our exchange list. Its editor, Dr. C. J. Blake, of Boston, is assisted by several American specialists. Wm. Wood & Co., New York, are the publishers. Its terms are $3.00 per annum. The tone of the introductory, the quality of the articles, and the number of the excellent reviews are such as throw credit on the editor and the publishers.

Index Medicus, a monthly classified record of the current medical literature of the world, compiled under the supervision of Dr. Jno. S. Billings, Surgeon U. S. Army, and Dr. Robert Fletcher, M. R. C. P., Eng. It is to be published by M. F. Leypoldt, of 37 Park Row, New York. As the editors are the librarian and assistant librarian of the Surgeon General's office,

their opportunities for making a complete index of recent medical literature are excellent.

Mr. Henry C. Lea sends us an announcement of some important medical works which he is about to issue; in fact, a part of them we have received. We notice among them The National Dispensatory, a second edition of Ashurst's Surgery, a second American edition of Bryant's Practice of Surgery, Conril and Ranvier's Pathological Histology, and Harrison's Human Anatomy.

We have received a copy of Messrs. Lindsay & Blakiston's Physicians' Visiting List. This yearly book is a general favorite in the profession.

The *Journal of Physiology*, edited by Dr. Michael Foster, and published by MacMillan & Co., London, has lately been placed on our exchange list. The necessity for the study of physiology is increasing more and more as medical science advances, and the necessity for a journal to carry on this study also exists. As this journal is edited by so distinguished a physiologist as Dr. Foster it is a sufficient guarantee that it will contain such papers only as may be relied on by the student. Every friend of scientific medicine should encourage a periodical of this kind. We hope that Dr. Foster may be successful.

At last the *Boston Medical and Surgical Journal* has concluded to include the city of St. Louis in its list of comparative mortality rates. For several years this journal has been giving the death rate of several of the largest cities of the United States, together with a few unimportant towns of New England, but never quoted the rates from the death reports of this city. We understand that the reason of this omission was that they thought that our deaths were not sufficient in number to our large population. They were loath to credit the assertion that ours is the healthiest city in the world.

METEOROLOGICAL OBSERVATIONS.

By A. WISLIZENUS, M. D.

The following observations of daily temperature in St. Louis are made with a MAXIMUM and MINIMUM thermometer (of Green, N. Y.). The daily minimum occurs generally in the night, the maximum at p. m. The monthly mean of the daily minima and maxima added and divided by 2, gives quite a reliable mean of the monthly temperature.

THERMOMETER, FAHRENHEIT—DECEMBER, 1878.

Day of Month	Minimum.	Maximum.	Day of Month.	Minimum.	Maximum.
1	36.0	39.0	18	14.0	23.0
2	32.0	48.5	19	16.5	28.5
3	42.0	57.0	20	27.0	33.5
4	39.0	48.5	21	27.0	30.0
5	32.5	47.0	22	5.5	16.0
6	34.5	38.5	23	10.5	25.0
7	24.5	32.5	24	1.0	12.0
8	30.0	35.5	25	1.0	18.0
9	31.5	33.0	26	12.5	23.5
10	31.0	33.0	27	11.5	19.0
11	28.5	34.0	28	6.3	22.5
12	29.0	33.5	29	19.5	30 5
13	30.0	32.0	30	16.5	23.0
14	27.0	29.0	31	20.5	30.5
15	22.0	25.5			
16	24.0	30.0	Means	23.6	30.7
17	20.0	25.0	Monthly Mean	26.6	

Quantity of rain and snow, 3.39 inches.

MORTALITY REPORT.---CITY OF ST. LOUIS.

FROM DEC. I, 1878, TO DEC. 28, 1878, INCLUSIVE.

Yellow Fever.....	Cholera Infantum.	Hydrocephalus and	Apoplexy 5
Measles	Inanition, Want of	Tubercular Men-	Cyanosis and At-
Syphilis, Cong'al.. 3	Breast Milk, etc.28	ingitis 4	electasis 7
Scarlatina 1	Alcoholism..... 7	Meningitis and En-	Premature and Pre-
Pyæmia 2	Rheumatism and	cephalitis..... 4	ternatural Birth..12
Erysipelas..... 2	Gout.....	All Diseases of the	Surgical Operat'ns.
Diphtheria 19	Cancer 9	Brain and Ner-	Deaths by Suicide.. 4
MembranousCroup11	Phthisis Pulmon..68	vous System.....37	Deaths by Accid'nt. 9
Whooping Cough..	Bronchitis.....18	Cirrhosis of Liver	
Typhus Fever.....	Pleuritis.....	and Hepatitis ..12	Total Deaths from
Typhoid Fever.... 6	Pneumonia 27	Enteritis, Gastro-	all Causes.....440
Cerebro Spinal Fe. 3	Heart Diseases....19	Enteritis, Peri-	Total Zymotic Dis-
Remittent, Inter-	Other Diseases of	tonitis, and Gas-	eases.....115
mittent, Typho-	Respirt'y Organs	tritis.....16	Total Constitution-
Malarial, Con-	Entero-Colitis.....27	Bright's Disease	al Diseases..... 94
gestive and Sim-	Marasmus—Tabes	and Nephritis ... 5	Total Local Dis-
ple Continued	Mesenterica and	Other Diseases of	eases.....199
Fevers.....16	Scrofula 15	Urinary Organs. 2	Total Develop'tal
Puerperal Disea's 6	Convulsions 23	Chronic lead pois-	Diseases..... 19
Diarrhœal " 7	Aneurism 1	oning..... 1	Deaths by Viol'ce. 13

CHAS. W. FRANCIS, *Health Commissioner.*

DEATHS AND RATE OF MORTALITY

Per 1000 Inhabitants, Annually, in the Largest American and Foreign Cities, According to the Latest Returns.

CITIES.	Population.	Date of Return.	Deaths from all Causes.	Annual Death Rate per 1000	DEATHS.	
					Infants under 1 Year of Age.	Persons Aged 60 Y'rs and upwards.
New York	1,086,000	5 weeks ending Dec 28	2,350	23.12	.....	.....
Philadelphia	877,500	4 " " " 28	1,192	17.99	.....	.....
Brooklyn	549,500	4 " " " 28	813	19.53	.....	.....
St. Louis	503,000	4 " " " 28	440	11.59	.....	.....
Chicago	460,000	4 " " " 28	572	16.20	.....	.....
Baltimore	355,000	4 " " " 28	464	16.54	.....	.....
Boston	353,000	4 " " " 28	627	20.96	.....	.....
San Francisco, Cal.	300,000	Month of November	369	14.80	.....	.....
Cincinnati	280,000	5 weeks ending Dec 28	539	20.07	.....	.....
New Orleans	210,000	4 " " " 22	359	22.28	.....	.....
Buffalo	170,000	.....	....	.....	.....	.....
Cleveland	162,000	.....	....	.....	.....	.....
Washington, D. C.	160,000	Month of November	296	16.70	.....	.....
Pittsburgh	145,000	" " December	202	18.37	.....	.....
Newark	126,000	.....	....	.....	.....	.....
Detroit	125,000	.....	....	.....	.....	.....
Milwaukee, Wis	123,600	.....	....	.....	.....	.....
Richmond Va	79,000	Month of December	125	19.10	.....	.....
New Haven, Conn	60,000	Month of November	87	17.63	.....	.....
Charleston	57,000	4 weeks ending Dec 28	106	24.17	.....	.....
Memphis, Tenn	50,000	.....	....	.....	.....	.....
Mobile	40,000	.....	....	.....	.....	.....
Denver		.....	....	.....	.....	.....
Galveston		.....	....	.....	.....	.....
Indianapolis		.....	....	.....	.....	.....
Springfield, Mass.	31,500	.....	...	.....	.....	.....
Nashville, Tenn	27,000	Month of December	53	23.47	.....	.....
Sacramento	25,000	Month of November	44	21.40	.....	.....
St. Paul, Minn.	20,000	Month of November	33	24.00	.....	.....
London	3,577,304	December 15 to 21	2,133	31.10	.....	.....
Paris	1,988,806	" 14 to 20	1,007	26.30	.....	.....
Berlin	1,019,620	December 1 to 7	496	24.70	.....	.....
Vienna	727,271	December 8 to 14	383	26.09	.....	.....
St. Petersburgh	669,741	December 1 to 7	539	41.80	.....	.....
Bombay	644,405	.....	...	.....	.....	.....
Glasgow	566,940	December 15 to 21	416	29.70	.....	.....
Liverpool	532,681	" 15 to 21	390	39.10	.....	.....
Naples	475,407	November 19 to 25	230	23.10	.....	.....
Calcutta	429,535	" 10 to 16	428	51.90	.....	.....
Hamburg (state)	406,104	.....	....	.....	.....	.....
Birmingham	383,117	.....	...	.....	.....	.....
Brussels	176,785	November 10 to 16	150	20.50	.....	.....
Manchester	360,514	" 10 to 16	172	21.90	.....	.....
Dublin	314,666	" 10 to 16	187	31.00	.....	.....
Leeds	304,948	" 10 to 16	163	27.90	.....	.....
Amsterdam	302,266	" 3 to 9	134	23.00	.....	.....
Sheffield	289,537	" 10 to 16	143	25.80	.....	.....
Rome	282,214	October 13 to 19	88	15.80	.....	.....
Breslau	267,000	November 3 to 9	130	25.30	.....	.....
Turin	227,846	.....	....	.....	.....	.....
Edinburgh	222,371	.....	...	.....	.....	.....
Alexandria	212,034	October 27 to Nov 2	106	28.70	.....	.....
Dresden	207,845	November 3 to 9	88	21.80	.....	.....
Bradford	185,088	" 10 to 16	88	24.80	.....	.....
Salford	170,251	" 10 to 16	90	27.60	.....	.....
Nottingham	165,267	.....	....	.....	.....	.....
Hull	143,139	November 10 to 16	67	24.40	.....	.....
Dundee	142,957	.....	....	.....	.....	.....
Portsmouth	129,461	.....	....	.....	.....	.....
Leicester	121,473	.....	...	.....	.....	.....
Oldham	107,366	November 23 to 30	61	29.60	.....	.....
Brighton	103,923	" 23 to 30	50	25.10	.....	.....

THE

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Original Contributions.

ARTICLE XIII.

THE MEDICAL PROFESSION. ANNUAL ADDRESS TO THE ST. LOUIS MEDICAL SOCIETY, January, 1875. By THOS. KENNARD, M. D.

In assuming the duties of the office to which your votes have elevated me, I assure you that I do so with the greatest degree of diffidence and much embarrassment, and trusting that, however much I may disappoint you in my endeavors to properly fill the position in which you have placed me, you will not attribute the failure on my part to any lack of interest or want of proper appreciation of the duty which I owe to my professional brethren who have called me to preside over their scientific deliberations during the present year. I am sorry indeed, that the very short time intervening between the annual election of our society and the installation of its officers, precludes the possibility of one engaged in active practice preparing a scientific address that would be either interesting or instructive to the majority of our members; but on occasions like these we intend rather to enkindle anew and to express our professional sympathies than to challenge criticism or excite scientific discussions.

I shall not attempt to entertain you with an essay upon any medical topic, but devote a few moments to the consideration of the practical workings of our profession, and to point out to you how nobly but vainly we have been struggling for many years to maintain the position, power and public influence which our professional attainments justly entitle us to, and which our brethren so easily held in this country, until within the past twenty-five or thirty years.

With professions as with individuals, it is well to cease awhile from the constant struggle for existence, to take a restrospective glance, that we may see what we have accomplished, wherein we have erred, and how our experience may profit us in the future, for we must remember that times change *and men must change with them, or lose the power and influence that they have already gained.*

No one would dream of comparing the soldiers and politicians of the present day with the heroes, whose unselfish bravery, stern integrity, and manly virtues laid the foundation of this now mighty Republic, or with those noble statesmen who immortalized themselves in maintaining and extending its limits from Plymouth Rock to the Pacific Ocean. Those were men who never sacrificed principle to policy, these whom we now call our rulers never sacrifice policy to principle—but as times change they readily adapt themselves to circumstances.

We thank God that amidst the general demoralization of the age, that we as a profession have not forgotten the holy and time honored teachings of our ancestors, but as a class are as pure and honest to-day as we were hundreds of years ago. From first to last our motives have been honorable, and we have labored to benefit ourselves that we might benefit others. We have worked constantly, though silently, with a fixed determination as individual members of a liberal profession to exert a beneficial influence upon the community in which we live, and, although the unprofessional may not have realized the magnitude of the work that we have accomplished, still the improved sanitary condition our city, and the greatly decreased death rate confirms my statement. Neither the allurements of wealth nor the desire for public place and power has led many of our members astray from the pursuit of the profession of medicine and its purposes, viz: the prevention and amelioration of human suffering and misery, both mental and physical. No other

profession seems to so completely absorb the thoughts of its votaries as does ours. Most men except physicians and divines abandon their profession or business as soon as it proves unprofitable in a pecuniary sense, but how many in our ranks struggle on from day to day, and from year to year in their vain endeavors to make a reputation and an honorable living, until, driven to destruction by despair, they are dragged to the drunkard's grave, or who can tell the secret history of suffering, mortification, disappointment and hope deferred of the hundreds of young physicians who in any other calling might have met with success, or at least spared themselves a vast expenditure of money and anxiety. Yes, gentlemen, the medical profession has proven itself to be the purest, the noblest and the most trustworthy of all professions, and it stands incorruptible and uncorrupted in the midst of the seething sea of corruption which has almost swept away honesty as one of the landmarks. Thirty-nine years ago this society was organized, since which time it has been the representative medical body of St. Louis, of Missouri and most of the time, of the Mississipppi Valley. From its incipiency to the present moment its main object has been the advancement of medical science and the mutual improvement of the members of the profession of this city. Inspired by the noblest aims, actuated by the purest and most unselfish motives it would be strange indeed, if during more than a third of a century of conscientious action we had not accomplished much for our own good and more for the general benefit of mankind, but living in the midst of one of the most wonderfully enterprising populations in the world; a people who in this short period have changed a thriving village into the great metropolis of the richest and most productive region of the earth; who by their united efforts have made St. Louis one of the wonders of the world. We have almost lost our identity, and forgotten that, as a profession, we have taken any part in raising her to the present high position which she occupies, and yet I believe that the medical profession has kept pace with her rapid progess, and, though some of our movements have been in the wrong direction and actuated more by hopes of personal than professional advancement, none such have been advised or encouraged by the St. Louis Medical Society—or practiced with her sanction.

By our individual and combined efforts we have done much toward changing St. Louis from one of the most unhealthy to

the most healthy large city in the Union, and by our continued charitable ministrations to the sick and destitute poor, we have saved many a valuable life, and relieved our citizens from what would have been a most burdensome expense if we had been compensated pecuniarily for our services. However, we claim no credit for what we have accomplished, for medical men have always and everywhere been in advance of their age in cultivating science, opposing ignorance, combatting error and superstition, and rendering charity, and, although as a rule, our scientific labors and charitable deeds have neither been properly appreciated by those whom we have served, or been appreciated nor acknowledged by the general public, still we enjoy the privilege of knowing and feeling that we have done much for the mitigation of human suffering and the prolonging of life, and have never been known to shirk our duty in the midst of pestilence, no matter how appaling, but, with dauntless courage and sympathizing hearts have stood at our posts and endeavored to do our whole duty as medical men, without aiming at the popularity of the hour, and without compensation beyond the pleasure and satisfaction of unostentatious charity in doing good to our fellow men. We have never hesitated between duty and pleasure, between charity and pecuniary profit, but always endeavored to act the part of true physicians.

We, as a class, have courted neither the patronage of the rich nor the poor, we have neither practiced a fawning servility to the one, nor hesitated to answer the call for help from the other, no matter from what abject poverty they came, but we have remembered that humanity, mercy and all the noble sentiments of the mind and promptings of the human heart have demanded of us that we should ever be ready to answer the summons of the sick and suffering, and to allow no man to die whom we might be instrumental in saving. Believing medicine to be the noblest of all arts, we have adhered to the profession of our choice, in spite of all disappointments and discouragements, and if we have failed in becoming useful to, and being disappointed in reaching the eminence to which we have aspired among our professional brethren, we have at least had the satisfaction of knowing and feeling that we have done our duty to our fellowman; and, if perchance, some of us have been misunderstood and misrepresented, we can congratulate ourselves

with the belief and fact, that slander and malice are born of jealousy, and our own defamation comes from those small minded creatures whom we can afford to pity rather than to condescend to lower ourselves to the degraded position which they occupy, to contend or quarrel with them. The mousing bat and the hooting owl never attracts the notice of the proud eagle, who, heedless of all below him, moves still swiftly on, cleaving the skies with the grandeur of his flight. We can easily afford to treat with contempt such pitiable defamation and press on in the race we have begun, until we gain a position which defamation cannot degrade.

Now my fellow members, having given a very hurried and imperfect sketch of the aims and motives that control *honorable medical men* in the pursuit of their profession, let us ask why it is, if my statements be true, that our earnest and unselfish endeavors have not been crowned with more success? Why have we not been able to secure for the science of medicine and its votaries, that high position to which it is entitled, in this most wonderful age of human progress? Why have not our proud achievements in the study of man brought with them the rewards and respect to which we are justly entitled. The reasons are many and palpable, if we only lay aside blind prejudice and take a calm view of our surroundings, and see how much many in our ranks have been influenced by them in spite of our time honored rules and regulations.

First, then, we have, as a class, failed to realize that the practice of medicine has a business, as well as a moral and scientific aspect, and the reason why so many practitioners fail to succeed, is because they neglect to manage their practice in a business-like manner, which is absolutely indispensable to success. The same qualifications which are requisite for a successful merchant are also demanded of a medical practitioner. Prudence, policy, perseverance, punctuality and common sense are prerequisites of success in every undertaking. We, however, whilst claiming to be possessed of an unusual share of all these traits of character, and to be more familiar with the workings of the human heart and mind than any other men, act like innocent and confiding children, and allow ourselves to be cheated out of half our living, and at the same time, to be classed as the most avaricious and exacting of all individuals. We thus not only unnecessarily lose hard-earned money, but at the same time, make enemies who

will never cease defaming us *as long as they owe us.* It is neither charity nor kindness to waste our time and brains on those who neither deserve it nor give us credit for what we do, when there are so many deserving poor around us calling for assistance every day, and when there is so much more profitable work for us to be engaged in. We should make those who demand our services *pay for them*, and restrict our charitable work to true charity.

Next, we assume a false position in our pretended dislike for appearing in the public prints. We denounce the customary methods of modest men in making use of the newspapers as a medium of communication with their fellow men, whilst we tolerate all manner of advertising from certain privileged classes. We know that the secular press, in its omnipresent and omniscient capacity, wields a powerful influence for both good and evil, and yet we fail to embrace the advantages which it offers for instructing the public and promoting our own interests, and abandon the field entirely to the charlatans, who make a most profitable use of our silence. The daily papers thus exert an immeasurable influence in favor of their patrons, the quacks, and very many of our prominent preachers and politicians become the most enthusiastic and zealous supporters of the unprincipled humbugs and knaves who are allowed to subsist upon the credulity of the public, because of the encouragement they meet with through our silence and failure to instruct the public. We discountenance and denounce all individual advertising through the press, or even by gratuitous attendance upon the poor, no matter how modestly and inoffensively practiced, whilst we not only tolerate, but encourage, the sedulous cultivation of the so-called official and allowable methods of advertising resorted to by the members of the cheap medical schools throughout the country, who have united themselves into faculties for mutual advertising clubs solely for the purpose of self-aggrandizement by bringing their names prominently before the public as professors or specialists in certain departments. We ignore the existence of quackery in our midst by refusing to expose its baneful effects, as witnessed by us in our daily intercourse with the sick, by failing to instruct the people in regard to the general truths of medicine; by allowing the otherwise intelligent to remain so profoundly ignorant of our science as to believe the most absurd and nonsensical misrepresentations of nostrum-mongers, and by calmly

folding our arms in stolid indifference, as if firmly convinced that we can not bring about a reformatory influence in matters which so intimately concern us. We know that moral suasion can exert no influence with impostors, and yet we fail to recommend suitable legislation to put a stop to their robbery and rascality.

We make literally no effort to correct and check, as far as possible, the immeasurable swindle that continues to be practiced by the false, inconsistent, indecent, immoral and infamous system of newspaper advertising of quackery, by neglecting to use our combined influence to put a stop to it, under the belief that we can do nothing in that direction. Because we can not accomplish everything that we desire, we fail to attempt a reformation in anything.

Again, until recently, we have manifested a blind prejudice against specialists. Knowing, as we do, that the medical science is too extensive, intricate and difficult for any one man to thoroughly investigate and master the whole field and make himself a competent practitioner in every branch, we have still, from selfishness and jealousy, exhibited a deep-grounded opposition to the practicing of specialties; and not until the better sense of the unprofessional created a demand for them would we tolerate them. In union there is strength, and by a division of labor communities exist, and hence to a certain extent, limited by the nature of the art, a division of labor is not only desirable, but indispensable for its full development. In every purely mechanical art, the more constantly the attention is directed to one single branch, the more frequently and continuously the same manipulation is gone through with, the more perfect and accurate will the artisan become in his performances; and hence, in those departments of our science where mechanical skill and delicacy of manipulation are required, those who devote their time and attention to one separate branch are more likely to become expert than those who attempt to perfect themselves in everything.

We would not, however, advocate the manufacture of specialists, as too many doctors are now made, merely by giving them their title of oculist and aurist, but we would recommend that men possessed of a thorough knowledge of our science be encouraged to devote their time to the study and practice of whatever particular department their tastes may direct them—men

of the highest order, who are capable of thinking correctly and of engaging in original researches in our science—for by this division of labor we can expect to accomplish more in developing our science and perfecting our art than by any other means.

Now, strange as it may seem, the opposition to specialists, which so long prevailed, came mainly from those who were continually advertising their special claims to perfection in specialties as professors in our colleges, but, knowing the advantages of such notoriety, were unwilling that those who were unconnected with their institutions should share the advantages and profits with them. They were always ready to discourage and denounce every individual specialist, but at the same time sedulously engaged in proclaiming their own advantages in practicing certain special branches of *which they and their friends had made them professors.* This same thing is being practiced now all over the country, and is the principal inducement held out to men to become professors in cheap medical schools. It is the meanest kind of humbuggery. It is the bitterest curse to our profession, and the most glaring swindle of the age. A number of ambitious men, whose talents are not sufficient to attract the attention of their medical brethren, conclude to promote their own interests by the foundation of *a mutual advertising club*, and forthwith they apply for a charter for a college, which, under our beautiful laws, they can as easily establish as a soap factory, and at once proceed to set forth in circulars their superior advantages and qualifications for teaching the science of medicine (God protect the art!), and, to prove their unselfishness in their undertaking they offer to teach and treat everyone gratuitously who may see fit to listen to or to employ them. They offer every inducement for them to come up from the highways and byways to be treated and taught for nothing. And, at the same time that they are working from purely selfish motives, they lay claim to the most marked disinterestedness imaginable, and claim that their only motive is to elevate the standard of the medical profession. They pay no regard to the preliminary qualifications of their students, but seem to think that every man, no matter how uncouth or ignorant he may be, is qualified to enter upon the study of medicine. They claim that all men of worth and talent must inevitably succeed, that they can show all the road to success, and that those who do not succeed are necessarily not qualified, and must give way and pursue some avocation less dignified and less

honorable than ours, and better suited to their mental capacity. No matter what our efforts at reform may be, we can accomplish nothing whilst this state of affairs is allowed to exist.

Such has been the experience of the profession at large for more than a quarter of a century. *Personal self-aggrandizement and college combinations* have thwarted every attempt at reform, and until we can free ourselves from such thraldom, any general advancement of the welfare of the profession will be utterly impossible.

For more than twenty-five years the representatives of reform have urged their claims before the American Medical Association. In May, 1869, at New Orleans, they thought it would be right and nothing more than reasonable to make it obligatory on all medical faculties to demand $120 as a minimum fee for a full course of lectures, believing that it would be a means of limiting the number and improving the morale and mental standing of medical students; but this recommendation did not meet with the approval of the *advanced corps of reformers at all*, for they contended that such an exorbitant sum might be necessary to compensate eight professors for lecturing under the old regime, but no such sum was requisite for eighteen or twenty enthusiastic men imbued with the proper love of science, and bent upon working for the profession solely for its own good. Our medical teachers also met in separate conventions for several successive years, and determined that something must be done to save us from further degradation, but they always adjourned as they had commenced their sessions, divided in opinion as to any uniform course to be adopted, and determined to push their individual and corporate interests regardless of the general welfare of the profession. Thus the whole matter of reform remained unsettled, until fortunately, or unfortunately, as the case may be, numerous enterprising and ambitious cliques in our large cities and small towns, as if by inspiration, detected the error in the old plan, which had proven so destructive and degrading to our profession, and determined with the *most unselfish motives, laying aside personal considerations entirely,* to revive all the broken-down medical colleges in the country, and to start as many new ones as possible, well stocked with *learned professors* who would be glad, for the good of mankind, to lecture for half-price, for no price, or even to pay for the privilege of lecturing, if, by so doing, they could only have an opportunity for elevating the stand-

ard of our great and glorious profession. Cheap schools and innumerable teachers, we are told, is to solve the problem which has so long puzzled us. They have already made formidable headway in forcing their ideas upon us, and whilst I rejoice that many of them have already failed in the crusade, I regret that some of our older institutions have been forced, or induced by self-interest, to join their ranks, and that the American Medical Association has given a quasi endorsement to the degrading and suicidal scheme. Fully appreciating, as they did, that the community at large cared nothing for medical men except the use they could make of them, and that cheap doctors, like cheap stores, were greatly in demand nowadays, they took courage and placed a marketable value upon their own qualifications, and in a few years have brought about a grand competition in the manufacture of cheap doctors. In fact, they have rendered the profession so cheap that, if their success at demoralization continues, they will deter the most honorable, high-minded and intelligent men from entering our ranks in the future.

Our profession is a liberal one, always has been, and I trust may ever continue to be. We do not desire to exclude any qualified man, no matter how poor he may be, from the honors, rewards and emoluments of our profession; we do not wish to be understood as inaugurating a crusade against any class of practitioners, no matter how widely we may differ from them; we simply demand that they be honorable men, and possess a correct knowledge of the science of medicine. Nor do we wish to circumscribe, in the least, freedom of thought, speech and action in regard to our profession. We acknowledge that every member of this community has the inalienable and undoubted right to judge us by our actions, and to employ as his or her physician any qualified man or woman he or she may see fit, every statute of our State, every law of our country and every resolution of a medical society to the contrary notwithstanding. We do not believe that freedom of thought or action should be abridged or encroached upon in the least, in regard to the medical any more than the clerical or legal professions, but we do desire to have our organic laws so altered as to properly define what constitutes a physician in the eye of the law, and to put a check upon the easy and rapid manufacture of doctors lacking proper qualifications. We are unwilling that every fool or knave who sees fit to style himself doctor or pro-

fessor shall enjoy the privilege of imposing his pretensions upon an unsuspecting community, for we do not believe that the public is so wedded to quackery as to desire to be humbugged by such impostors. Moreover in spite of the advice of our model reformers who expect to accomplish so much good by their manufacture of doctors, and who profess to treat with silent contempt every encroachment of quackery, we contend that every sensible man must acknowledge that the experience of forty years has proven how futile our attempts in that direction have been. The current of popular credulity has increased instead of decreased during that period, and now that so-called universal free education has been established throughout the country, there can be nothing too preposterous and absurd to be believed and adopted by a large portion of every community, as is proven by the rapid spread of every ism that panders to the credulity and immorality of mankind. Quackery has been allowed to monopolize the public press, and avaricious and unprincipled editors whose every word and act is controlled by money, have aided in every possible way in the dissemination of falsehoods and foolishness in regard to medicine. Newspaper advertisements and editorial commendations of quacks has so long constituted almost the only source of instruction to the general public upon medical subjects that a vast number of people accept such lies as truths, and become inspired with a feeling of confidence in them which no medical man can successfully combat, and more especially is this the case when the religious press lends its columns (as it so often does) to the dissemination among the public of all manner of vileness, dishonesty and immorality; all sorts of misrepresentations, absurdities and inconsistencies; all that will make the masses know less of truth and more of error. There has been no want of interest in reforming these by the majority of our profession, but for twenty-five years, whenever the subject has been brought before our medical associations, the most strenuous opposition has been met with from professors in the various schools, who have always contended that legislation could accomplish nothing, and have claimed that the panacea for the cure of all evils in our profession was the elevation of the standard of medical education, which they propose to accomplish by the very means of all others best calculated to degrade it, viz.: by the multiplication of medical schools and the cheapening of medical education and medical diplomas. They have

assumed that they were *the profession* and so far have carried their point on almost every occasion.

Now, gentlemen, I trust that you have not misunderstood my strictures upon medical colleges, or concluded that they have been inspired by selfish motives on my part, for such could not be the case, when individually I have never been connected with one except as a student. No one can entertain a higher regard for high-toned medical schools and competent medical teachers than I do, and I not only admire them, but wonder at the grand results they have accomplished under the many difficulties that they have had to contend with in this country. How with limited means and no endowments, men—capable men—have found so much time to spend in the lecture room, clinic and hospital, and have given not only their services and talents, but hard-earned money which they could ill spare for the maintenance of the high-standing of these institutions. I honor all such men, but contend that we can best assist and encourage them in their noble work by demanding a high standard of medical education, and by encouraging only refined, educated and honorable men to enter upon the study of medicine. We need learned men, men capable of original thought, and thorough research in our own profession, and an increased number of learned specialists, whose specialties have grown out of their intimate knowledge with their whole profession as a science, and who prefer to practice some one part of the art. We do not need numbers, for surely the army of seventy-five thousand doctors that are now employed in this country is sufficient to minister to the miseries of all. Nor do we expect every M. D. to be a learned medical philosopher, but we do desire them to have sufficient education to fulfill their duties with credit to themselves and benefit to mankind. It is not necessary that every physician should be thoroughly accomplished in every department of our science, but it is desirable that all of us should be refined gentlemen, and reasonably well educated men.

There was a time when it was a distinguished honor to gain the title of M. D., and when it conferred upon us privileges not enjoyed by other learned men, and why should not the same hold good to-day, for surely we are no less entitled to the respect and honor of our fellow-citizens than our predecessors were. We may not have as many giant intellects in our ranks as there were during the early part of the present century,

and there may not be any now living who are as much entitled to the homage and gratitude of man as were Harvey, Hunter, Jenner, Cooper, Mott, Velpeau and a host of other medical heroes of their day, but surely we have more accumulated knowledge and more deep learning than they had, and have done more for the general benefit of mankind. Not that the human mind has increased in power and perfection in modern times, so that we can now seize intuitively, as it were, on what cost the ancients much study and application, and hence know all that they did, as a matter of course; for the infant of 1875 requires as long a time to learn to talk and to walk, or to acquire any other accomplishment, for aught that we can see to the contrary, as did the Egyptian babe. There are no intellects nowadays superior to the most brilliant of ancient times, but our facilities for acquiring knowledge have vastly improved, and we can hear and learn more real facts in a few weeks than the ancients could know in a thousand years, or ever know at all. The little that has been transmitted to us, however, from the earliest ages must impress us with the greatest respect for the learning of antiquity, and as we become more familiar with what the ancients knew and had accomplished thousands of years ago, we may be brought to believe that their wisdom was not so inferior to ours after all, and that we have no just claim to cherish the idea of modern perfection.

Finally, gentlemen, I trust that in spite of all our discouragements and disappointments we will remember that medicine is the most ancient, the most useful, and the most honorable of all professions. The art of medicine probably had its commencement in the earliest community. The old adage, *nusquam medicinia non est*, is literally true, but the science of medicine is of comparatively recent origin, and is as yet, notwithstanding the immense advances that have been made, still in a very imperfect condition, and there is work enough for all of us to do. We have as yet seen but the beginning of what can be accomplished in the saving of human life, and the prevention of human misery.

Our science has many claims upon us, and humanity demands that every medical man should do his utmost towards the correction of existing errors, the utilization of existing facts, and the increasing of our knowledge by original investigations. None of us should be too modest to express our opinions, or con-

sider ourselves too young to have an opinion. Every man is obscure in science until he makes himself otherwise, and in our profession as in every other, young men have always done more than older ones for its advancement.

Vesalius published his great original work on anatomy when but twenty-nine years of age. Andral published his on pathological anatomy when but twenty-seven years old, and Bichat had completed all his immense labor before he was thirty. Newton was but twenty-three, Copernicus thirty-three, Kepler thirty-eight, Harvey and Marshall Hall but forty one when their respective discoveries were made. So we must look to the younger members of our Society for its advancement and support, and remembering that we meet here for the purpose of advancing our science and art, we must practice mutual forbearance towards each other, and allow no selfish motives to obtrude themselves here, for science knows no party, clique or school, but is dignified, charitable, liberal and magnanimous to all.

Other favorite methods of advertising are the *running* of medical journals, hospitals and free dispensaries. Every cheap-school needs its official organ to puff it; its hospital or dispensary to make an exhibition of its charity and to build up the reputation of its accomplished specialists, who would never become known without it.[1] The majority of them have naturally been very short lived, and the profession has lost nothing by their early death. In fact it would be much better for the medical profession and the community at large, if two-thirds of the minor journals and medical schools now in full blast, were suddenly extinguished. Advertising through hospitals and dispensaries has been much more profitable and extensive in its scope than the journalistic plan, and has been a favorite one both with the schools and prominent quacks for many years, until now in all large cities it is a *sine qua non* for success. "In 1876 there were forty-four medical dispensaries in Philadelphia; doubtless there are more now, as such institutions *rarely fail*. Besides these, there are an

1. To prove how zealously this field has been worked I note some statements taken from one of the oldest and most valuable medical journals in the United States. In the January number of the *Boston Medical and Surgical Journal*, Dr Billings gives a concise history of medical journalism in this country; as follows: From 1797 to 1878 inclusive, 249 regular medical journals have been started in this country, most of which were intended as advertising media for medical schools and private individuals.

indeterminate number of private and special dispensaries, as well as the dental dispensaries, where surgical operations are performed and treatment prescribed. The hospitals of Philadelphia, at present number forty according to the statement of a member of the State Board of Charities, this including a few like the Howard Hospital and the Charity Hospital, which have no accomodation for resident patients, and are simply dispensaries. In these hospitals, there are now over *eleven hundred empty beds*; or in other words, five hospitals, the size of the Pennsylvania Hospital might be closed to the public without being missed by the community. Other large cities are equally as well supplied in proportion to their population. The metropolis, New York, of course, greatly exceeding all others in the grandeur of her eleemosynary institutions and her magnificent charities, both public and private. In our own city the Health Commissioner, includes in his weekly reports, thirty-eight institutions; most of them however are not hospitals, but merely asylums and homes. We have not suitable and sufficient accommodations for our insane and paupers."

"The laborer is worthy of his hire, but if the efforts of those who persistently saw away at the branch that supports them prove successful, the currency value of a physician's services will soon be an unknown quantity, to be represented only with the aid of the metric system, perhaps as a dynamized centesimal dilution of nothing at all."

ARTICLE XIV.

OBSERVATIONS AND EXPERIMENTS WITH THE AGENTS EMPLOYED IN ANÆSTHETIC MIXTURES. By LAURENCE TURNBULL, M. D., of Philadelphia, Aural Surgeon at Jefferson Medical College Hospital.

These various mixtures of chloroform with ether and alcohol, were used as means of escaping the danger of chloroform. They first received their impulse from the report of the Chloroform Committee of the Medical Chirurgical Society of London, who declared their superiority in point of safety. M. Perrin[1] gives an account of the first death known at that time, to have taken place under a given mixture of ether and chloroform and gives the credit to the chloroform as being improperly administered, and Snow says the patient died of hemorrhage, but our reading of the case, carefully reported by Dr. R. Crockett,[2] leaves the decided impression that chloroform arrested the heart's action, induced vomiting, which caused a stoppage of respiration. The following is an abstract of the important facts in the case and is interesting as the first death from the mixture. "A sprightly little boy, five years of age, was brought to the doctor to have a fatty tumor removed from his back. The tumor commenced at a point at its inferior termination opposite the last rib, about two and a-half inches to the right of the spinous processes, and extending obliquely upwards, crossing the spine seven inches, requiring two elliptical incisions nine inches long for its removal." The operation was commenced at 9:30 A. M., April 4th, and the dissection was rapidly executed, stopping to ligate a large artery that was early divided; the remaining arteries were compressed as they were divided; the tumor was quickly removed and a ligature applied to the last artery, being the sixth in number. While sponging the wound the boy began

1. Traité d' Anesthésie Chirurgicale, Par Maurice Perrin, Professeur agrégé a l'Ecole Impériale de Médicine et de Pharmacie Militaire, etc. A Ludger Lallemand, Professeur agrégé à l'Ecole Imperiale de Médicine et de Pharmacié Militaries, etc., Paris, 1863. 8 vo. pp. 668.

2. *Am. Journal Med. Sciences*, July, 1857, 284–5.

to vomit, and on examining the wrist he was found to be pulseless. Dr. K., who had charge of the anæsthetic and pulse, replied that "the pulse had never given way until he began to vomit." He ejected a small portion of the contents of the stomach. He was immediately placed in the "prone position," as recommended by Dr. Marshall Hall; the finger was introduced into the mouth to be certain that the tongue had not fallen back so as to obstruct the glottis, or the entrance of air into the wind-pipe, and the extremities were rubbed with aqua ammonia. The patient died three or four minutes from the commencement of the vomiting. "He lost probably four ounces of blood, certainly not exceeding six." There was no post mortem examination.

The anæsthetic we used was a mixture of washed ether, four parts, and one of chloroform, obtained from the late Frederick Brown, of Philadelphia, whose character is a sufficient guarantee that they were pure. Every preparation for the operation having been made, the administration of the anæsthetic was commenced by Dr. Crockett, observing all the precautions so fully recommended by Erichsen, p. 78 of his "Operative Surgery." As soon as anæsthesia was induced the sponge was confided to Dr. Kincannon, who held his finger all the while on the patient's pulse. The doctor concludes, "I have lately employed this anæsthetic freely, formerly having used ether alone. *As yet I have not seen a case of death reported from ether*, or this mixture of it with chloroform, that I can now recollect. Are there any such reported? I fear all the deaths from anæsthesia are not reported." Five deaths[3] from the use of this mixture have been published, two having occurred very recently.

The chief object of these anæsthetic mixtures is the avoidance of the danger from *shock* or from the depressing influence upon the heart-action, which chloroform most certainly exerts and which ether and alcohol prevent. The committee before referred to proposed the following mixtures:

A.	Alcohol	1 Part.
	Chloroform	2 "
	Ether	3 "
B.	Chloroform	1 "
	Ether	4 "
C.	Chloroform	1 "
	Ether	2 "

3. On The Advantages and Accidents of Artificial Anæsthesia by the writer. 2d edition, pp. 300. Lindsay & Blakiston. 1879.

Dr. Sansom's mixture[4] is equal parts by measure of chloroform and absolute alcohol. The introduction of alcohol which plays an important part in the mixture was, according to the Doctor, due to Dr. Harley. The committee says it is by "the uniform blending of the ether and chloroform, when combined with alcohol, and probably the more equable escape of the constituents in vapor." The chloroform is the potent agent and the others chiefly adjuvants, vehicles and dilutents of the chloroform.

Dr. Sansom gives the following testimony as to the stimulating effects of alcohol in counteracting the depressing influence of chloroform. In my own experiments I have found that alcohol has had the greatest effect in sustaining the heart action during the influence of the chloroform. I can particularly recollect one instance in which alcohol having been administered in vapor to a frog, it was impossible to cause death by any strength of chloroform vapor. In recommending this mixture before the Obstetrical Society, of London, Dr. Sansom went one step farther, and stated that this mixture gives off a proportion of chloroform vapor in agiven time almost exactly half of that which is given off by chloroform pure and simple. This result is not confirmed by any experiments of his published.

What are the objections to anæsthetic mixtures?

1. The length of time required for the production of complete anæsthesia. 2. The probability of entire sensibility not being abolished. 3. The unequal rate of evaporation or vaporization of the fluids.

There is not any doubt but that the process is slower and attended with more excitement by the mixed fluids than by chloroform alone. The second objection can not be sustained. The third is the "element of danger." It was first advanced by Snow. He says: "When ether is combined with chloroform the result is a combination of the undesirable qualities of both agents without any compensating advantage," and the danger is because the operator, toward the end of the process, may be giving a pure chloroform when he thinks he is giving the weaker mixture of vapors. Dr. Ellis[5] endeavored to prove this, and states:

4. Chloroform: its Action and Administration. By Arthur Sansom, M. B., London.

5. On the Safe Abolition of Pain in Labor and Surgical Operations, 1866, by Anæsthesia and Mixed Vapors. By Robert Ellis, Surgeon Accoucheur, London. 1866, pp. 80.

"Out of the six or seven minutes occupied by the evaporation of the half dram of fluid, the first was occupied chiefly by the ether, the next three by the chloroform with a little alcohol, and the last by the alcohol alone. In an inhaler the patient would have breathed, for one-fifth of the time, chiefly the vapor of ether, for the next three-fifths that of chloroform with a little alcohol, and at last only the vapor of a minute quantity of alcohol" (pp. 24, 25). These results are not stated as obtained by actual experiments, and they depend, first, upon the purity of the agents employed; second, the boiling point has a great influence upon the results, for the more volatile the fluid the greater will be the variation, and I here give the boiling point of the most important anæsthetics.

The temperature which is constant for the same substance, under the same atmospheric pressure, is called the *boiling point*.

The following are the agents employed as anæsthetics in the form of vapor, the boiling points being given for the mean pressure of 760 millimetres:

Protoxide of nitrogen	—88°
Carbonic acid	—78°
Chloride of Ethyl v. pure ether	+11°
Common ether	35°
Chloroform	63°
Alcohol	78°
Oil of turpentine	157°

A difference of pressure of 0.25 centimeter will cause a difference in the boiling water one-tenth of a degree. The boiling point is also influenced by dissolving in a fluid a substance more volatile than itself (as ether and chloroform); it increases the boiling point in proportion to the amount dissolved. The temperature of the atmosphere has a powerful influence on these volatile agents, as it is a well-known chemical fact that the saturability of the air increases vastly with the increase of temperature, and the capacity of the air for aqueous vapor is doubled with each 27° of temperature Fahrenheit. Sulphuric ether at 60° F., and thirty inches of the barometer expands two parts in the air into three, and forms, therefore, at that temperature and pressure, one-third of the air inhaled into the lungs of a patient. Under the same circumstances chloroform expands fourteen parts of air into fifteen, and consequently the vapor of chloroform constitutes one-fifteenth part of the air inhaled.

The following experiments were made October 30th, 1878, so as to determine the time required for each of the agents to evaporate on a given surface of tissue paper suspended in the air at a temperature of 70° F., one drop of each being carefully measured by the same dropping machine, and the time accurately kept by my son, Dr. C. S. Turnbull, and confirmed the rough experiments made before the Dental Convention at Washington, D. C., on October 10th, 1878, and proved the facts stated in the author's work [6]. I have always found that when such a mixture was poured upon the inhaler, the most volatile spirit will arise first, then the next, and so on, leaving the last easily evaporated upon the inhaler. Another important fact was proven, and which was referred to in the author's work, that the alcohol employed in the mixtures with chloroform in England, also the ether made from such alcohols, are much inferior to those made in this country from grain, not from wood or potatoes. These latter are slow in evaporation, and are mixtures themselves containing a large amount of carbonaceous products.

The following are the results obtained after numerous experiments with as many of the agents employed in the various mixtures obtained from the reliable establishments of Powers & Weightman, Bullock & Crenshaw, Wyeth & Bro., and J. P. Remington:

Ether	12 seconds.
Chloroform	24 "
Alcohol Ab. 95°	1 min. 24 "
Ether (common) 0.750	24 "
Methylic alcohol (B. & C.)	1 min.
Alcohol (common, W. & Bro.)	10 "
*Potato spirit (B. & C.)	12 "
Ether hydrobromic (R.)	12 seconds.

Temperature, 70° F.
Barometer, 30.08 inches pressure.

*Again put through charcoal.

Besides the danger from inhaling the chloroform pure and simple, there is another to be prevented, that is to get rid of the the watery vapor from the mixture and lungs of the patient, which collects on the sponge; if the napkin or inhaler gets close to the patient's mouth and nose it will most effectually prevent

6. The Advantages and Accidents of Artificial Anæsthesia. By Laurence Turnbull, M. D., Philadelphia. Lindsay & Blakiston, 1879.

air from reaching the lungs. How is this to be prevented? By squeezing out the sponge, napkin, lint, or if an inhaler is employed that cannot thus be treated, cast it aside and take a clean napkin, with as much starch in it as possible, so as to keep its shape. It may again be inquired which is the best mixture to employ in ordinary surgical operations. The mixture C. In midwifery, mixture A, or, as it is familiarly known, A C E or ace of spades mixture, the most agreeable of all. In the operation for ovariotomy I prefer the C mixture, as also advised by the late Dr. Washington Atlee; the volume of the two agents are so different that they ought to be mixed by weight, not by measure, else the chloroform will be much in excess, as it is four times the weight of ether. In employing alcohol it should be as near to absolute as possible, and free from color, smell or taste. The ether need not be anhydrous, but ordinary strength and well washed. Whatever mixture is employed, nothing will obviate the necessity of care in the administration, and above all not to give more of the agent than is absolutely necessary to keep the patient free from pain; not one drop more, for, like all potent medicines which we employ, an excessive dose is sure to kill, and unless we have before gauged the patient's powers, let caution be our guide in the administration of so powerful an anæsthetic. In our anxiety to see the various steps of an operation, do not saturate the sponge or lean over the patient, and by accident suffocate him. It is unfortunately too much the practice to entrust the inhaling apparatus to some inexperienced hand, who perhaps never before administered an anæsthetic, and even in some hospitals to the youngest assistant surgeon or dresser. It has been well observed by Perrin, "We believe we shall render a veritable service if we popularize the idea that anæsthesia should be observed and studied at the hospital with as much care as every other subject of practical medicine." Sansom[7] also says, "The administration should be experienced; several hospital committees have acted wisely in appointing a chloroformist, a measure which is not of less value to the operating surgeon than it is to the benefit of the patient. One who administers chloroform in any case should confine himself exclusively to the task he has undertaken, and should constantly mark the symptoms." And what are the symptoms of danger?[8] The

7. Op. Cit. p. 477—31.

8. See Accidents and Advantages of Artificial Anæsthesia, Op. Cit. p.

failure of the pulse, irregularity of the respiration, and the blanched countenance, and, as beautifully expressed by an old writer[9] in reference to successful administration of anæsthetics, "Proceed steadily but cautiously to the end in view. He makes haste slowly, and with a boldness tempered by wisdom, carries his patient down into the dark valley which borders on death, drowns human agonies in the water of Lethé, and triumphs in the crowning glory of his art."

ARTICLE XV.

ON PREVENTION OF PUERPERAL FEVER IN PRIVATE PRACTICE. By CARL WALLISER, M. D., of Highland, Ill.

More than twenty-five years have elapsed since Semmelweis directed the attention of the medical profession to the etiology of puerperal fever. His assertions that the feverish diseases of the puerpera are for the most part due to blood infection resulting from resorption of decomposed putrid matter, have frequently been assailed. He made many enemies by putting the question, whether infection might not also be produced through the hands and instruments of midwives and physicians? In this decennium only scientific men examined these assumptions of Semmelweis, and finally adopted the theory: That most puerperal diseases are due to infection, which infection in the majority of cases comes from without. Since in the large lying-in hospitals antiseptic precautions for prevention of puerperal fever have been taken, since the patients have been treated in the same manner as those suffering from traumatic fever, septicæmia, pyæmia, etc., morbidity and mortality of the puerpera have greatly diminished. Many private physicians and particularly country practitioners keep clear of the etiology of the puerperal diseases. Without examining the cause of infection and the spread of the epidemy, many "doctors" fill up the morbidity-list and mortality-tables with the handy entries, "milk fever,"

9. I. C. R. *Am. Jour. Med. Sci.* 1867, p. 190.

"puerperal peritonitis" or "self-infection." I know many cases where exitus letalis would have been avoided through an early rational prophylaxis. It should be, for every physician, a case of conscientiousness, a sacred duty, to avoid that death of a once healthy mother be occasioned by malpractice through ignorance or through neglect.

As a pupil of Bishoff (of Basel), the pioneer of "obstetrical antiseptics," I have not only assisted at his first operations even, but I also, in the course of my practice, both here and in Switzerland, made it a point of modifying and simplifying Bishoff's antiseptic method for the use of private practitioners. I have performed under antiseptic auspices all kinds of manual and instrumental obstetrical operations, and I never have seen during the puerperium any symptoms of resorption fever.

Before mentioning the most practical points of the prophylaxis of puerperal diseases, I shall give in the table (as an illustration) a brief report on a recent epidemy of puerperal fever, its probable origin and spread. All the cases registered in the table were attended to by the same midwife; they were all normal accouchments, taken care of by the midwife alone. Several women, who during the epidemy were delivered by physicians or other persons, escaped the danger of infection and remained free of disease in puerperio. Of the reported cases I saw one on the first, two on the second and all others between the third and eighth day; several of my patients have been seen and examined by my colleagues. I know that during the same time other physicians of this place had sick puerperas in treatment, and that death occurred in four of their cases. As far as I could ascertain the same midwife had also attended these women. Concerning the origin of the epidemy, I have made scrupulous investigations. Previous to October, 1876, diseases of lying-in women were not often met with in this town for some years. The first case noticed was an elderly multipara, who had been delivered of a dead, decomposed fœtus; the midwife attended at the same time three women, who all fell ill. From October, 1876, to February, 1878, cases of puerperal fever came into treatment in long or short intervals. I do not remember one case of a then delivered (by the mentioned midwife) woman, where during the first week there were not more or less grave symptoms of the disease. It may be cited as an important etiological moment that during the winter of 1876 and 1877, scarlatina pre-

REPORT OF A RECENT EPIDEMY OF PUERPERAL FEVER IN HIGHLAND, ILL.

No.	Date of Delivery.	Names, etc.	Leading Symptoms and Particulars.	Issue.	Remarks.
1	Oct. 2, '76	Mrs. N., multipara	febris continua; metritis; delirium	recovery	confined of a putrefied child.
2	Oct. 13, '76	Mrs. W., "	high fever; vulva and vagina swollen; painful; discharging putrefied matter; catarrh bronch	recovery	placenta detached.
3	Oct. 30, '76	Mrs. B., "	parametritis; perineal rent covered with sanious pus; erpsipel. inflammation of the introitus vaginæ; fever	recovery	hemorrhage post partem.
4	Nov. 11, '76	Mrs. Bl., "	consciousness; high temperature; period chills; erysipelas vulvæ; lymphangitis of the right thigh; diarrhœa	incomplete recov.	hard labors.
5	Nov. 12, '76	Mrs. Fa., "	gangren of the vulva; fœtid discharges; spontaneous opening of a perimeter; abscess in the vagina; abscess of the mamma	recovery	dirty surroundings.
6	Dec. 7, '76	Mrs. K., primipara	sanious lochia; continual fever; peritonitis; endometritis; breast abscess; several small rents	recovery	
7	Jan. 4, '77	Mrs. M , "	17 years old anæmic lady; several chills on the 6th Jan.; metritis; pelvic abscess; metastatic abscess in l. knee; both thighs swollen; purulent catarrh of lungs; peritonitis e perforatione; died 8th day	death.	Case seen in consultation with Dr. F. Marine.
8	Jan. 22, '77	Mrs. Sp., multip.	endometritis; swollen introitus vaginæ; several superficial rents; scarce lochia; febris continua	recovery	
9	Jan. 31, '77	Mrs. H., "	breasts in good condition, not painful; endometritis; no discharges; diarrhœa; high fever	tardy recovery	diagnosis of a colleague: milk fever.
10	Feb. 18, '77	Mrs. F., "	parametritis; retentio urinæ; erysipelas of vulva and skin of both thighs; bowels constipated	recovery	placenta detached.
11	Aug. 8, '77	Mrs. L., "	mania agitans; wild deliriums; first chill 7 days after delivery; high fever; copious vaginal discharges of sanious pus; perimetritis; spontaneous opening of abscess through rectum, nose and mouth (from brain)	insanity	profound perineal rent.
12	Aug. 19, '77	Mrs. Ba., "	prolapsus uteri soon after delivery; repositio performed by the midwife; perimetritis, peritonitis, pleuritis	recovery	placenta torn out.
13	Aug. 2, '77	Mrs. Br., "	fœtid lochia; parametritis; scarlatinous exantham of collum, pectus and abdomen; diarrhœa	recovery	scarlatina in the family.
14	Aug. 11, '77	Mrs. Ha., "	septic fever; chills on the 4th day; parametritis; delirium; pleuritic symptoms; catarrh bronch.; 2 days before death peritonitis e perforatione; large pelvic abscess; died on the 11th day	death	case seen in consultation with Drs. F. & K. Highland
15 to 16	Sept. 2, '77 Spt. Nv. '77	Mrs. Sch., " 2 multip., 1 primip	continued fever; peri-parametritis; vulvitis purulenta; breasts in good condition; secretion normal. chief symptoms: fever; metritis; fœtid lochia; breasts in all 3 cases in good condition	recovery recovery	reported as "milk fever."
19	Dec. 18, '77	Mrs. S., primip.	high temperature; painful abdomen; parametritis; erysipelas vulvæ; small rents	recovery	hard labors.
20	Jan. 16, '78	Mrs. Sch., multip	all symptoms of pyæmia; chills; metastatic abscesses in knee and lungs; pleuritis; large pelvic abscess; thrombosis venæ iliac s.; emboli; hydrops of the thighs and legs; peritonitis; deliriums; vulva and vagina covered with sanious pus; lymphangivitis, diarrhœa; (placenta detached by the midwife	death on 14th day	saw the patient 8 days after delivery; also examined by Drs. R. K. & F. Highland.
21	Feb. 5, '78	Mrs. S., primip.	high fever; bowels constipated; painful abnomen; inflammation of introitus vaginæ; small rents	recovery	

vailed in the neighborhood and it is proven that the midwife had been in contact with children suffering from diphtheria and scarlatina. Among the population of our district (about 3,000), morbidity and mortality rates of lying-in women were very high at that time; a "physiological" puerperium was an exception, a "pathological" one the rule. What country practitioner does not remember similar periods, when most of the obstetrical cases in his village expired under more or less grave symptoms of septic fever, when many well attended puerperal cases died from peritonitis, septicæmia and pyæmia?

Most of the text-books on midwifery give etiological moments for origin of the puerperal fever, the artificial detachment of the placenta and the decomposition of such of its particles as remain behind in the womb. We accept this theory, though not to its full extent. How often does the medical attendant detach the placenta, and how seldom does resorbent fever occur, provided there is not a prevailing epidemy, a cause of infection? Every obstetrician knows, that those lying-in women have a greater liability to puerperal fever, as have undergone some manual or instrumental operation; particularly when protracted labors preceded or when the surgeon's hand worked under very difficult circumstances. Large lacerations and contusions are very often the result of such operations of neglected cases. "*Without wounds*, (says Bishoff) and *without infection of these wounds there is no puerperal fever.*" Small wounds or rents of the parturient canal are an addition to almost every accouchment, the infection being only too often carried by the hand or instruments of the attendants, or by the foul air surrounding the patient.

The principles of prophylaxis of puerperal fever are threefold:

I. To avoid protracted labors and dangerous contusions by early and well performed manual and instrumental operations; to prevent spontaneous perineal rents through lateral incisions.

II. Prevention of accumulation, decomposition and putrefaction of retained membranous or placenta rests; to facilitate the escape of discharges; to occasion a good contraction of the uterus.

III. *The exclusion of unclean matter, foul air from the genitals*; closing of rents (silk, catgut, silver wire sutures of superficial and deep lacerations of vagina, vulva and perineum); most scrupu-

lous cleanliness of the attendant physician, midwife and nurse; antiseptic treatment of all wounds, whether superficial or deep, large or small; to avoid any contact of undisinfected objects (fingers, sponges, instruments, linen, wadding, etc.,) with the vulva and vagina before, during or after delivery; in one word, *prevention of all infection from without.*

In realizing practically the principles of obstetrical antisepsis, we shall detail this method, which strikes us as the simplest and surest, and which has led us to very satisfactory results. Before exploring a parturient woman, I wash both hands and arms in a warm water solution of two per cent carbolic acid. I require the same process of the midwife or any other person whose fingers come in contact with the parturient canal. As unclean, dirty (i. e. infectious) matter adheres very often to the sleeves, and is not so easily noticed there as on the fingers, the coat must be taken off and the shirt sleeves turned up. In many hospitals students are directed to put on taffety sleeves when attending lying-in women. This should be avoided, as these over-sleeves, when not thoroughly disinfected, rather spread than prevent the infection. I have often found expectorated matter on the inner and outer side of the coat sleeves and cuffs after attending children suffering from diphtheria. What physician, upon entering the room of a puerpera, remembers all the cases to which he has lately attended? Why do obstetricians so often speak of the coincidence of puerperal fever with scarlatina and diphtheria? In exploring the parturient canal the hand should be well anointed with carbol oil (ac. carbol 1, ol. oliv. 9). We never use the butter or grease offered us. All instruments are washed in the carbol water, and before the use anointed with carbol oil. The midwife is ordered to follow the same directions. From the beginning of the first labors to the birth of child and placenta, we practice every two hours a warm-water injection in the vagina; and when there are any signs of decomposed liquor amnii, or when the labors are protracted, we substitute for it a two and one-half or three per cent carbol. ac. solution, of which several pints are injected at short intervals. We have found that such injections clean perfectly the parturient canal and prepare it for an easier passage of the child. Immediately after propulsion of the placenta, we inject into the cavum uteri the above-mentioned two to three per cent solution of the antiseptic (the water must be cold). We have found the best instruments for these intra-

uterine injections those which consist of a soft rubber tube three feet long, one end attached to a metal or hard rubber tube half the length of the common stomach catheter, the other end communicating with a large funnel or a reservoir holding one gallon. By alternately rising or sinking this "irrigator" we may adjust the power of the stream to all demands. Thus we may use great power to carry away placenta rests, less power for simply washing out blood clots.

These prophylactic measures are continued throughout the puerperium. After "physiological" accouchments, we perform vaginal injections twice a day for two weeks, by means of an ordinary syringe with a piece of soft rubber tube on its nozzle. When there are symptoms of accumulation or decomposition of the discharges, or when rests of the placenta or of the membranes have remained, we make every three to four hours the above mentioned intra-uterine injections of the same (two to three per cent) solution of carbolic acid. Rarely a double-current catheter is necessary to secure the free exit of lochia and injected liquid. Tute, impregnated with carbolic acid, or wadding soaked with ten per cent carbol. oil, is always laid in the introitus vaginæ. Many obstetricians scatter a mixture of acid, salicyl. and amylum (1:5) on the inner side of the labia, and on all wounds and contusions. Whatever materials we use must often be renewed. When in puerperio the contraction of the womb lessens, secalē may freely be given in combination with injections of cold water in the cavum uteri; the contraction of the uterine walls with its veins and vasa-lymphatica prevents any decomposed matter spreading in the serosa and parametrium. The general condition of the puerpera ought never to be neglected. I allow sufficient aliment, finding the commonly prescribed "water-porridge" not to afford nutrition; any intercurrent disease may be treated without regard to the local antisepsis. Great care must be taken that the bowels are regularly moved, as constipation in the puerperio increases the hyperemy of the pelvic organs; oleum ricini (15.0), tartarus natronatus (15.0 : 50.0 aq), magnesia sulph. (30.0 : 90 aq.); acid. sulph. dilut. with water and sugar are such laxatives as may be used to assist the prophylaxis of the puerperal fever.

In hospitals the practice of puerperal antisepsis is somewhat different. Schede uses a self-holding drainage-tube for constant irrigation; Chamberlain, Schücking and others recommend more

or less complicated instruments for the same purpose; the practitioner prefers his syringe to costly irrigators.

To-day almost everywhere carbolic acid is used as the most powerful antiseptic. The boracic acid is less irritating, but also less powerful; it is used in a four per cent solution; the hyposulphite of soda (five per cent) is a harmless, but often insufficient surrogate of carbolic acid. Salicylic acid is frequently used as a disinfectant in the proportion of 1 to 600-900 of water (salicylate of soda does neither prevent nor arrest putrefaction; it should be excluded from the list of antiseptics). "Sanitas," so boastfully recommended of late from the English markets, is, according to Dr. Glaser's investigations,[1] even when strongly concentrated, not as powerful as a three per cent solution of carbolic acid. The almost obsolete thymol has lately been re-introduced into surgical practice, and is now claimed to be the best and most useful antiseptic, being ten times less detrimental to the organism than carbolic acid. In Volkman's clinic, at Halle, the following formula is used for external antiseptic purposes: thymol 1.0, alcohol 10.0, glycerine 20.0, aq. 1000.0.

Dr. Ranke, in Vol. 128 of *Volkmann's Samlung Klinischer Vorträge*, gives an account of the success of thymol, and his results encourage the introduction of this "antiseptic of the future" into the obstetrical practice. P. Bruns (*Berliner Klinische Wochenschrift*, 1878, Vol. 29) strongly recommends alumina acetica as an excellent antiseptic, well qualified for constant irrigation. Probably the disinfectant powers pertain to the acid, as a one to two per cent solution of acetic acid gives the same result as one of alumina acetica of the same strength.

All these surrogates of carbolic acid have been tried in order to find a substitute which might possess all the advantage of carbolic acid without having its detriments. It is well known that Lister's antiseptic method has many opponents; who will be surprised if "Listern in midwifery" is assailed?

"Carbolic acid has a poisonous effect" is their war-cry, and Lister's adversaries gather scrupulously all cases where a patient died during or soon after the application of the antiseptic. Not wishing to deny a direct idiosyncrasy of certain persons against carbolic acid, I find, in examining the details of the reported cases, no proof for the absolute dangerousness of the anti-

1. Correspondenzblatt für Schweizer Aerzte, 1878, No. 19.

septic method. Death during or immediately after the resection of the hip-joint, after the operation of strictura ani, after opening of a thorax empyem, has often occurred before Lister's method was known.

Individuals suffering from rupture of the cervix uteri, from pelvic peritonitis, from abscesses with discharge of pus through the bladder, from erysipelatous abscess of the glutæus muscle, and suppuration of the knee-joint, died suddenly under the application of the antiseptic. Are such fatal cases really due to carbolic poisoning? Is the bold conclusion, "*post hoc ergo propter hoc*," a just or even a logical one? Senfteleben thinks that carbolic poisoning is produced by the presence of phenol in the blood; he recommends in such cases as antidote a sulphuric acid mixture (acid sulph. 1.0, aq. gumos 200, syr. 30.0; one tablespoonful every hour), the produced sulpho-carbolic acid being innocuous.

We will not close this paper without referring to the position of the midwife in cases of puerperal fever, and its prevention. In the country these women attend to almost all accouchments, and there is probably no practitioner who has not been inconvenienced by want of knowledge and by stubbornness of the midwife. Protracted labors, dangerous operations, might often be avoided through a more rational and natural action of the attendant.

In some places of Germany, all midwives who attend women suffering from puerperal fever are prohibited by law from the practice of midwifery for a certain period. Such bold infractions upon individual rights and freedom can exist wherever a strong police is supported by the nature of governmental institutions. Simpler and less shocking sanitary measures are those which interdict the obstetrical practice to every person (either physician or midwife) who is not fully acquainted with the principles and practice of every day midwifery, and who does not know how to prevent infectious diseases in puerperio. A better scientific instruction of all obstetricians, stricter and exacter examinations of the candidates for the practice of midwifery will answer the demands of modern medical science better than prohibitory laws. Why continue to expose patients to an increased chance of death from diseases that are preventable? Why sacrifice so many lives through neglect or indolence? To realize the principles of obstetrical antisepsis in private practice and in the country is

less difficult than in overcrowded hospitals and dirty tenement houses.

Spencer Wells, Tarnier and others have obtained satisfactory results without antiseptic treatment and prophylaxis, by scrupulous cleanliness alone; for most private practitioners an absolute cleanliness is, and will always be a vain wish, as they cannot enforce such sanitary precautions as prevail in the private hospital of Wells, and in the Paris maternity.

ARTICLE XVI.

WHOOPING COUGH; A NEUROSES, PATHOLOGY AND TREATMENT.

By J. J. CALDWELL, M. D., of Baltimore, Md.

Being impressed with the apparent truth of Niemeyer's views of the pathology of this disease, viz: "That whooping-cough is a catarrh of the respiratory mucous membrane, combined with intense hyperæsthesia of the air passages;" this, together with the various other excitable or nervous demonstrations, etc.; the periodic and very rapid and jactitating cough, and temporary brain and spinal demonstrations, and the cerebral and facial arterial injection, followed by the apparent utter intermediate immunity—all pointing to the fact that this was but a periodic seizure of the peripheral nerves distributed to the mucous membrane of the air passages.

The investigation of this subject was forced upon my observation during the summer of 1870, in Brooklyn, N. Y., where this disease was epidemic. My own children suffering terribly, induced me to search in every direction for a more ready method than the time honored—of several months duration. I found that there was but little unity in its pathology or treatment, some advocating quinine for its antiperiodicity, and others the light carburetted hydrogen emanating from the gas factories as acting successfully through the nervous system, etc.

My conclusion was this: If Niemeyer's ideas are correct, whooping-cough has its origin in a local nerve lesion of the mu-

cous membranes of the air-passages with excessive catarrh. "*Ubi irriatio ibi affluxus.*" Ergo: A topical application of anæsthetics with gentle astringents, would be the treatment indicated.

It seems strange to my mind that this famous master did not fall into the same reasoning. Therefore I adopted the following treatment with my little ones, as well as a dozen other cases, with most happy results. (Reported in *Boston. Med. and Surg. Jour.*, April, 1871.) Also a report of several cases with like results in a late number (1875) of the same journal, by Dr. Winthrop Spooner.

My mode of treating in these cases was very simple and ready, viz.: to place Codman & Shurtleff's steam atomizer in position on a table before the patient, charged with—

℞. Fl. ext. belladonna.....gtt vj–xij.
Ammon. brom.....ʒj.
Pot. brom.....ʒij,
Aqua dist.....f ℥ij.

This spray is rapidly carried over into the face, mouth, and lungs of the child, and applied ten to fifteen minutes, until the pupils are dilated by the effects of the belladonna mixture; this application to be made morning, noon and bedtime. This has so far cut short the spasmodic cough within two or three days uniformly, and almost to a certainty. More recently we note reports of cases of pertussis successfully treated (almost instantly) by the inhalation of sulph. ether, in this instance discovered by Dr. ——, while dressing a fracture of a child suffering from whooping-cough. The first administration cut short the malady then and there. The Doctor followed up this experience with the happiest success, the history of which he has given to the medical journals, thus again sustaining my theory of its neurosis and the good effects of anæsthetic treatment.

Again, during this discussion[1] (before the section) my views were maintained; although the treatments differed, still they all pointed to the nerve origin. The beneficial effects of vaccination, on this affection, as ably demonstrated by Dr. W. B. Ulrich, Chester Pa, and strongly indorsed by several leading physicians present, though the modus operandi of course is obscure, still to my mind maintain its nervous lesion. The argument, that because whooping-cough is contagious and constitutional, it could

[1] Amer. Med. Ass.

not be treated locally, nor considered a neurosis (offered on the above occasion) does not obtain in this any more pertinently than it would in the local treatment of vaccination as a prophylaxis in small-pox, etc. If it be said that the vaccine is absorbed and thus acts constitutionally, the same may be said of the bromo-belladonna application to the bronchio-alveolar surfaces.

Says Dr. J. Winthrop Spooner (see the *Boston Med. and Surg. Journal*, November 5th, 1874): In the *Journal*, dated April 20, 1871, appeared an article by John J. Caldwell, M. D., of Brooklyn, N. Y., entitled, "A New and Successful Treatment of Pertussis." The treatment recommended was the following:

℞. Fl. ext. belladonna.....m. v to x.
Potass. bromid.....ʒi.
Ammon. bromid.....ʒij.
Aqua.....ʒij. M.
Sig. Inhale one tablespoonful in the ordinary steam atomizer.

Several successful cases were reported, but since that date I have seen no report of cases treated in that way.

Feeling that we have in this method of treatment a great addition to the therapeutics of a disease often distressing, and sometimes fatal in its results, I have been led to publish a few cases of my own treated in a similar manner. I am in the habit of using a tablespoonful of the above mixture and filling up the glass of the atomizer with water.

CASE I—April 1st.—A boy of 14; has had the disease for two weeks. The cough has been severe and the whoop well marked. Vomits after nearly every meal. The next record is April 5th, which is as follows: Patient has been at the office daily and used the atomizer. His cough has been less since the first inhalation, and he has whooped but once. The vomiting has ceased, and there is present but a slight cough, which is not distressing.

CASES II and III were two children (brother and sister), aged 15 and 12. Well marked symptoms of whooping-cough had been present for two weeks. The same remedy was used four days, under my supervision, with decided abatement of symptoms. As they were improving, I lent them a hand atomizer, which I afterwards understood they used only for a day or two. The cough lingered for several weeks in both cases, although

the whoop was never well marked after the use of the atomizer. In fact, during the latter period, the disease seemed to be a simple bronchitis aud nasal catarrh, the result of a series of colds, as the patients were very imprudent.

CASE IV.—A child, æt. 3; coughs; febrile symptoms for ten days; yesterday, for the first time, had a decided whoop; vomited every meal to-day; face is swollen, eyes congested, and this morning lids adhered from excessive secretion. The atomizer was used twice daily. Improvement commenced at once. From that date there was no vomiting, the countenance resumed a natural appearance, and at the close of a week the whoop had ceased, and in less than a fortnight not the least trace of the disease was present.

CASES V, VI and VII were children of one family, aged eight, five, and three years respectively. The disease had existed for about two weeks; the symptoms were mild, but sufficient for diagnosis. Treatment was commenced on June 27th. On June 30th I saw them again, and there was a decided improvement. At the close of one week from the commencement of treatment they were well.

CASE VIII happened at the same time with the preceding three and the history was similar.

CASE IX.—A child aged 2; she whooped for the first time on July 20th. On account of her age, there was difficulty in administering the remedy thoroughly, and perhaps it was on that account that for the first few days there was no perceptible improvement. However, the treatment was continued, and by the 26th the symptoms had much abated and by the 30th the patient was well. A little syrup of squills and tolu was used in this case, as a palliative, in the first few days, and this is the only case in which any treatment but the inhalation was used.

CASES X and XI were a little girl of seven and her mother. With the former, the cough and whoop had been present for four weeks, and the mother had coughed for two weeks. The health of these patients was delicate, being predisposed to pulmonary disease, and a sister of the lady had died of phthisis,

following pertussis, it is said. In both these cases, although the urgent symptoms were relieved, that is, the vomiting ceased and the cough and whoop became much less frequent under treatment, yet the disease went through its regular course in a mild form.

Says Dr Spooner, This, then, is the result of my treatment of pertussis by inhalation. When the disease is at all severe, I use the atomizer twice daily until the urgency of the symptoms is relieved, and then continue it once daily until the cough has entirely disappeared. In some cases, I have somewhat varied the proportion of the ingredients, but have made no essential departure from the formula given.

My further experience has thoroughly maintained the great benefits arising from this mode of treating whooping-cough, and I truly believe it to be the readiest and most reliable extant, and furthermore believe that I am the originator of the idea that whooping-cough is a nerve disorder, and that I was the first to treat it as such, and that my treatment was new and reliable. I make statement to bring out the merits of my case, and earnestly hope my brethren will discuss it candidly, freely and fully.

65 N. Charles Street.

Reports on the Recent Progress of Medicine.

THE SPIRIT OF THE EUROPEAN MEDICAL PRESS.

By A. C. BERNAYS, A. M., M. D., Heidelberg; M. R. C. S., Eng.; Member of the German Society of Surgeons, Berlin, Etc.

A SIMPLE TREATMENT OF POST PARTUM HEMORRHAGE—(Dr. Pugliese in *Lyon Medical.*) Although we gave it as our opinion, in a late discussion of the subject at the St. Louis Medical Society, that post partum hemorrhage is very rarely the cause of death, we think the plan here advised deserves to be brought to the notice of the profession, it being quite new, and because it may be of service in some cases.

"The method I employ has suggested itself to everyone. It is simply *inversion of the body.* The patient is seized by the shoulders and turned a quadrant of a circle, the center of which is her pelvis, out of the bed, and her head declined until it reaches the floor. This practice, besides fulfilling the first indication, partially subserves the second.

"If the heart, which has lost part of its energy, can no more propel the blood to the last ramifications of the uterine arteries, the patent mouths of the sinuses of this organ, which are suddenly transferred to the highest part of the venous circulation, having become vertical, lose their prime cause of bleeding. The blood thus takes its natural flow to the vena cava. Then nothing remains but to stimulate the womb to contraction, and reinstate its physiological function.

"The assistants are charged to support head and shoulders of the patient. The obstetrician proceeds to external and internal frictions of the womb.

"A subcutaneous injection of ergotine is made in the hypogastric region with a hypodermic syringe. The solution ought to be prepared during labor, for the possibility of post partum hemorrhage ought never to be disregarded, especially after protracted labor.

"This is the only reliable way of administering ergot in such

cases, for, taken internally, it might not be absorbed; besides it would be impossible to bring it into the stomach when the head is hanging downwards; nothing but some alcoholic liquor can be administered by means of a sponge put into the mouth.

"My theory has not been sanctioned by long experience, and I will mention a recent case devoid of anything not intimately connected with the subject: My patient was held inverted on a strongly inclined plane for one hour and a-half. When I began treatment, she was pulseless for several minutes, and before I could feel the returning pulse at the wrist, consciousness manifested itself so far that she began to talk. The tongue gave signs of life before the radial artery. Inversion alone worked such a miracle. This fact alone seemed to warrant me in publishing the above notice. It is scarcely necessary to add that the patient must not be placed in the horizontal position but by degrees."

Decidedly the treatment of Pugliese is reasonable, and worth as much as any method practiced heretofore. Is it not astonishing that, although we have practiced raising the pelvis for a number of years, no one has thought of going one step farther, and performing total inversion?

ON EXARTICULATION OF THE HIP JOINT.—(*Bulletin de l'Academie de Medicine*, 1877, Nos. 44, 48, and 1878, Nos. 4, 8, 12, 13, 16, 17.) The rather long discussions on the above subject were caused by a speech delivered by M. Verneuil, October 30th, 1877, in which he reduces the fatal results of exarticulation of the hip joint to two main causes: the great loss of blood and the unsuitable, inadequate after-treatment of the large wound. The first point elicits a discussion of the methods of exarticulation, and we propose to give a concise statement of the principal points made by the speakers on this subject. The second point led to a discussion on the treatment of wounds which we must pass by, as it contains nothing original, this subject having covered thousands of pages of surgical literature within the past three years.

VERNEUIL claims that the compression of aorta abdominalis is often impossible and most incomplete. The prophylactic ligature of the femoral or external iliac is insufficient, on account of hemorrhage from the branches of the arteria hypogastrica.[1]

1. R. Davy's new method of compressing the common iliac artery with a shaft from the rectum may do away with this difficulty.—(*British Med. Jour.*, vol. i, p. 704).

Verneuil therefore recommends an exarticulation by making two flaps after the fashion of the extirpation of large tumors with a scalpel, advancing gradually, layer by layer, and by ligating all vessels doubly before cutting them. By this means he reduced the bleeding to a minimum in three cases. In a fourth case, where he made use of the galvano-cautery, he experienced great hemorrhage, collapse and death after two hours. Verneuil has also approved of this method at the shoulder-joint, and since 1872 has found it to answer admirably, even in the larger amputations.

ROCHARD is in favor of the method for the two largest exarticulations, only remarking that Marc. Duval operated after a similar plan in 1858.

MAURICE PERRIN believes that this method could only be considered blood-saving in the hands of very skillful and experienced surgeons. He recommends an incision similar to Langenbeck's for excision of the hip-joint, claiming (and we believe correctly) that the flaps can be cut out very rapidly after the head of the femur is exarticulated, and that manual compression of the parts will control the hemorrhage.

RICHET holds the opinion that the flaps can be made very rapidly, the vessels compressed by sponges and tied successively, as he has done with the best results in two cases.

LEGOUEST has found it best to cut out the anterior flaps, layer for layer, in fresh traumatisms, but forms the posterior flaps by a single incision, using manual compression after the bone has been exarticulated. In chronic diseases the dilatation of the vessels is so great that the speaker is in favor of Verneuil's method.

LEFORT thinks that at all events there is sure to be considerable bleeding from the smaller vessels when the slow method of advancing is made use of, and sides with Perrin. But, if out of 88 well described cases, 43 resulted fatally within twenty-four hours, 13 within forty-eight hours and 18 within a week, the hemorrhage during the operation is certainly not the only cause, but the loss of the blood contained in the amputated limb bears a large proportion of the blame. According to the experiments of Profs. BRUNS and RANKE, the amount of blood equals 750 grmms., (25 ℥). This is supported by the fact, that out of 158 cases of primary exarticulation during the war of the Rebellion 142 died

(nine-tenths), but of 8, whose thighs had been amputated previously, 4 recovered. In the literarature of "peace surgery" we find, that 8 out of 10 cases recovered in the same manner. LeFort proposes that an Esmarch bandage ought always to be applied to the sound limb; in some cases he proposes that the blood be allowed to collect in the sound limb up to the close of the operation by means of a tourniquet applied to the femoral vein.

(KOHLER, Staff Surgeon German Army. The more important cases from the clinic of Prof. BARDELBEN, treated during the time, from January 1st, '76–'77.)

During this period of time (the latter part of which the reporter himself spent in Charité Hospital under Prof. Bardelben,) 2,000 surgical cases were dismissed from the Hospital. Out of this number we will give the following statistics, which seem to us of especial interest, leaving the rest of the very accurate report for the private study of those interested.

1. *Accidental Diseases after Traumatisms.*—Erysipelas occurred twenty-three times; 8 cases occurred under the antiseptic treatment; 10, in cases that were not treated by this method; 5 did not originate at the place of the traumatism. Erysipelas was the direct cause of death in one case only.

2. Pyæmia and septicæmia appeared in 6 cases after they had been in the hospital some time.

3. Comminution of the bones of the foot excepting talus and calcaneus; subcutaneous and intramuscular hemorrhage, as far as the middle of the leg. Next day, amputation after Pirogoff; second day fever as high as 40° centigrade; sixth day, phlegmone; seventh day, erysipelas; fifteenth day, pleurisy; twenty-fifth day, brown and reddish sputa; twenty-ninth day, death. Post mortem revealed numerous hemorrhagic infarcts of the lungs; veins of the leg permeable, their parietes normal down to the wound itself.

4. Compound fracture of the ankle-joint in a woman, aged 72 years, (comminuted fracture of the malleol. int., fracture of talus and fibula). Conservative treatment. Fever on the fifth day; eleventh day, offensive, profuse suppuration; thirteenth day, epileptiform access; secondary hemorrhage, parenchymatous inflammation, ninenteenth to twenty-third day; chills,

twenty-third to twenty-fifth day; twenty-eighth day, hemorrhage from the space between talus and tibia. Excision of malleol. int., which let out an ounce of very offensive pus; no open vessels could be found; daily disinfection; death from pyæmia mult.

5. Compound fracture of the tibia, with extensive contusion of soft parts. When admitted there was emphysema surrounding the wound. After twenty-four hours, temperature of 40.1°; continued stream of solution of salicylic acid over wound; acute purulent œdema following. Amputatio femoris on the seventh day; death following in a few hours.

(*a*.) PYÆMIA (4).—I. *Traumatic Inflammation of the Knee-joint*. Puncture by aspirator; removal of pus; washed and injected with carbolic acid; wound sealed by plaster; next day erysipelas, starting from leech bites (the leeches having been applied before admission to Charité); after 12 days large collection of pus, about the middle of the thigh, communicating with the knee-joint; incision, striking pus; antiseptic dressing; death.

(*b*). SEPTICÆMIA (2).—1. Severe bruise of both feet, great subcutaneous destruction of soft parts, and fracture of bones of the tarsus. Gangrene of the skin over the malleoli after a few days. Antiseptic dressings. Eleventh day, offensive suppuration; twelfth day, pus empties into the ankle-joint; excision of malleolus ext.; continued fever; temperature of 41°; death by septicæmia.

2. Frost gangrene of both feet; clear demarcation on ninth day, but beginning sepsis; temperature 45.5°; amputation of both legs; temperature again reaches 40° after second day; necrosis of flaps; death by sepsis.

There were four deaths from chloroform out of 1,500 administrations. Only very small amounts of chloroform had been given in the four cases. Not only these cases, but a number of disagreeable narcoses caused us to introduce the new chloroform prepared from the hydrate of chloral. No more accidents since its introduction.

Translations from the German.

PHYSIOLOGY AND THERAPEUTICS IN OPHTHALMOLOGY. [Taken from Prof. A. Nagel's *Jahresbericht ueber die Fortschritte und Leistungen im Gebiete der Ophthalmologie*]. By S. POLLAK, M. D., Surgeon of the Eye and Ear Infirmary of the St. Louis Hospital.

EFFECT OF CHLOROFORM NARCOSIS UPON THE PUPIL.—There is a great divergence of opinion in regard to the therapeutical effect and physiological explanation of chloroform narcosis on the pupil.

WESTPHAL (*Virchow's Archiv.* Vol. 27) has examined a great many pupils under chloroform, and found, except in very anæmic individuals, that the pupil regularly contracted at the beginning of the narcosis. The temporary dilatation, in those not deeply narcotized, which follows an irritation of the skin, or on loud calling, he attributes to the reflex action of the sympathetic. Westphal leaves it undecided whether the contraction arises from irritation of the fibres of the oculomotorius, or from the inaction of the fibres of the sympathetic.

BUDIN (*de l'etat de la pupille pendant l'anesthesie chirurgicale produite par le Chloroforme. Indication pratique qui peuvent en resulter Gaz. des Hop.*) arrives at the following conclusion: In surgical chloroform anæsthesia there is a constant relation between the condition of the pupil and the degree of anæsthesia. In the stadium of excitement the pupil is always dilated, but it contracts gradually and strongly as soon as relaxation of the muscles ensue, and remains contracted while anæsthesia lasts. Strong excitement of the sensibility of any part of the body causes transient dilatation of the pupil. With continued inhalation this reflex dilatation disappears, and the pupil remains strongly contracted. This is the time for operation. A dilatation of the pupil during the operation indicates a less profound anæsthesia and a return of sensibility. The condition of the pupils is therefore a good guide in chloroforming patients. Vomiting may

also cause the pupil to dilate, and partially suspend the anæsthesia. Budin's work has in view chiefly a practical surgical object.

SCHIFF (*La pupilla come estesiometro. Imparziale* 1874) sought and found in the movement of the pupil an æsthesiometer to determine the sensibility, especially in curarized animals. With curarized dogs and cats every irritation of the sensory nerves in any part of the body resulted in a dilatation of the pupil, even when the irritation caused no pain, and excited only the tactile sensibilities, such as touching of the skin. The greater the sensibility, the greater the dilatation of the pupil. The dilatation manifested itself after the quickest and gentlest touch, which could not have changed the blood pressure. There was no other sign of feeling. Hence the dilatation of the pupil is the best reaction of sensibility. Schiff has thus attained important results in regard to the sensibilities of different organs and tissues that have hitherto been left in doubt. Irritation of any of the tissues, even muscles and tendons, will cause the pupil to dilate more or less. Of the spinal cord only the posterior columns are sensitive. An electric current applied to the gray matter of the cord, or to the anterior and lateral column, may cause a rise in the blood pressure, but it will not cause dilatation of the pupil.

There is some sensibility in the anterior four-fifths of the cerebrum, but none in the cerebellum. Electric currents in the intestines produced no dilatation, but mechanical irritation did The dilatation of the pupil upon the irritation of the sensibilities is effected through the cervical sympathetic. It is suspended after its division, as well as the division of the medulla oblongata. In the brain is the change of the sensitive impression into the motor impulse. On the removal of the portion of the brain anterior of the corpora striata, the reflex action upon the pupil becomes slower, but on the entire removal of the brain the iris responds only to the impression of light, but not on irritation of sensibility.

The condition of the pupil during chloroform narcosis, according to Schiff, differs widely from Budin's observation. In the commencement of the narcosis and until complete relaxation, Schiff found entire dilatation of the pupil, and that through the active contraction of the dilator or radiating fibres. Myosis does

not continue in dogs (except sometimes in a very late stage of the experiment) long after a general muscular relaxation denotes great danger, or after death having ensued. Of eleven dogs which were chloroformed to the lowest blood pressure, or nearly to death, in four only was there a moderate contraction of the pupil, and never so strong as Budin states it to be. The dilatation which ensued, after sensible irritation, was only of short duration. Schiff concludes that the moment for operation, as indicated by Budin, is just the most unfavorable one, for all reaction upon sensible irritation is then extinct. There is a period in chloroform narcosis when all feeling of pain ceases, but consciousness is not entirely gone, when incisions or sawing of bones are perceived as mere tactile impressions, for the sensation of pain is conveyed to the brain through the gray matter of the spinal cord; but the tactile impressions through the white matter of the posterior columns, which, being less vascular, do not so readily succumb to anæsthesia, and retain their function a little longer. Budin seems to have confounded impression from contact with sensation of pain.

Schiff refers to many observers who, like himself, have found the pupil of man and animals *dilated* during chloroform narcosis, but Budin has also many endorsers who saw the pupil *contracted* while in deep narcosis of chloroform. From these diametrically opposite results, we must conclude that chloroform does not act on all animals alike, and further, that the different brands of chloroform were of unequal purity.

O. LIEBREICH, the distinguished chemist, maintains that when, on inhalation of chloroform, dilatation of the pupil ensues, that the chloroform is mixed with bodies of the bichloride series, which has the property to dilate the pupil, with final transition into the dangerous contraction stage.

Other anæsthetics which affect the pupil are mentioned by Schiff. It occurs in inhalation of nitrate of amyl that sensibility is retained, as manifested by the cries of animals, and yet the pupil does not dilate on irritation of sensibility, the very reverse in chloroform. Chloral exhibits the opposite effect of chloroform on the pupil, namely, a *very strong contraction*, a true myosis, without a preceding dilatation. The reflex dilatation upon irritation of sensibility ceases entirely, although other manifestations of pain continue for a while longer. Inhalations of chloroform which were made after an injection of chloral in a dog,

brought about a slow dilatation of a strongly-contracted pupil. This militates against the general assumption that chloral acts by being converted into chloroform in the body.

ORE was the first to inject chloral into the veins in tetanus; he suggests to use the same procedure as an anæsthethic in surgical operations. It is condemned by the learned societies of France as unwarrantably dangerous. Nevertheless, experiments were continued by Oré, DeNeffe and Van Wetter with good results, without any of the dreaded dangerous consequences, such as embolism, phlebitis, hæmaturia.

WARLOMONT (*Des injections intra-vieneuses de chloral comme agent d'anœthesie chirurgicale. Ann. d'ocul*) discusses the advantages and disadvantages of the injection of chloral into the veins, as an anæsthetic in surgery. His own experience extends to eleven successful cases. More than thirty are reported without an unfavorable result. "All roses, but thorns will follow." Among his observations are two on the eye; an enucleation, and an extraction of cataract, both with aged people, (68 and 74 years). One of these cases was affected with chronic bronchitis and emphysematous lung, yet this condition was no obstacle to the successful result. The advantages of the anæthesia by intra-venous injection of chloral are: Prompt and positive effect; accuracy of the dose; anæsthesia is followed by a protracted, quiet sleep; absence of an exciting stage; absence of vomiting, and compatibility with derangement of respiratory organs.

The disadvantages are: Difficulty of execution; necessity of utmost care and caution; the long duration of the effects of the application; possibility of embolism, phlebitis, hæmaturia, and intensity and long continuance of its effect, without the possibility of counteracting it.

SCHIFF (*l'imparziale*) arrived at the following conclusions after more than 5,000 experiments, as to *the difference of anæsthesia by ether or chloroform:* Ether paralyzes first the respiration, and after that the blood-vessels and the heart; while chloroform can paralyze the heart and blood-vessels at once, without previously paralyzing the respiration. Artificial respiration with the latter agent is then useless, as oxygenation has ceased. Compression of the abdominal vessels and lowering of the head may be of advantage. Chloroform can cause death at the first inspiration. Ether is safer and less dangerous.

BADER, in his ward in Guy's Hospital made some experiments with the administration of *croton chloral hydrate* in intolerance of light (*Med. Times and Gaz.*). The result appears to be, that it proved efficacious only in young subjects suffering from syphilitic kerato-iritis, in doses of from five to ten grains, several times a day. But twenty grains were given four times a day, without appreciable good or bad effect. The bad taste of the croton chloral hydrate was the greatest objection.

GLAUCOMA—Continued. Excerpts from a Lecture by L. WECKER. [Translated by WM. DICKINSON, M. D., of St. Louis, from *Klinische Monatsblätter für Augenheilkunde* for 1878.]

As intimated in a previous number of the JOURNAL, our author suggests a new operation for glaucoma, and instruments adapted to its performance.

SCLEROTOMY.

I have caused to be made sclerotomes of different widths, from 2 mm. to 4 mm., having lance-shaped extremities. With these I penetrate the anterior chamber at one millimetre from the corneal border, holding the instrument parallel with the iris, and than carry it tangentially to the upper or lower extremity of the corneal diameter, through the anterior chamber. The angle of the iris is thus incised in all the course of the sclerotome. The section termed subcutaneous, by the employment of a sclerotome of 2 mm. in width, describes, in a cornea having a diameter of 12 mm., a curve of 10 mm. The operation performed in a cornea of like diameter, with a sclerotome of 8 mm. furnishes a curve-section of 12½ mm. You have often seen me perform these operations; and among others upon a colleague who was affected with simple glaucoma of the left eye. Three months after the operation he wrote to me that "he was well satisfied with the result and he thought it would be permanent." Still I do not at present wish to express myself upon the comparative effects of sclerotomy and iridectomy. Most probably

the beneficial effects of the operation would be increased, if the sclerotome should be held tangentially to the corneal border, and the section increased in extent by a-third or a-half-millimetre, provided the operator is perfectly sure that the inner section describes an uninterrupted curve, and the trabecular tissue at the iris angle, in the vicinity of the upper or lower extremity of the vertical diameter of the cornea (according to election of place of sections) is deeply incised. By this mode we can properly make use of a very small sclerotome, which facilitates the operation.

Formerly I performed sclerotomies with a simple Græfe's knife —but the necessity of enlarging the section by a sawing movement, and the difficulty of making two sections opposite each other of like extent, determined me to have knives made by which these accidents might be obviated with a sclerotome 2 mm. broad. Two wounds situated near the corneal border are obtained, distant from each other about 1 mm. and describing a curve of about 8 mm., in a cornea having a diameter of 12 mm.; and by the employment of a sclerotome of 3 mm. a broad curve of 4 mm. is secured.

I shall not speak of the sclerotomes made by Quaglino with a lance-shaped knife, nor those by Bader and Spencer Watson, with v. Græfe's knife. The section made by the former having the same extent as in the iridectomies, and those by the latter exceeding them. These sections appear to me inevitably to incur the danger of iris compression (iris einklemmung), which would be entirely avoided by the use of smaller sclerotomes and the employment of eserine. Every sclerotomy should be preceded by several instillations of this alkaloid, and its use should be continued for severals days thereafter. (Two instillations daily, with a change of bandage, which the patient should wear for two days.)

Generally, no operation for glaucoma, whatever mode may be adopted, should now be undertaken without the previous employment upon the patient of eserine, but it should be borne in mind that in acute glaucoma the effect of this myotic is but very imperfectly manifested. I frequently ask myself, what effect, probably, would A. v. Græfe obtain with the calabar extract in acute attacks, when he recommended this agent, not as Laqueur did, for the alleviation of the glaucomatous symptoms, but in order to contract the pupil and thus facilitate the introduction

of the knife into the anterior chamber without injury to the lens? Evidently the considerable increase of intra-ocular pressure, and the impediment to absorption resulting therefrom, renders quite ineffectual even the best eserine in producing contraction (though sufficient for the introduction of small instruments), and such must surely have been the result of the employment of the extract of calabar bean.

I should weary your patience should I still speak of the so-called myotomies of the ciliary muscle, as Hancock and Heiberg have performed them. These operations, however, have been of value in demonstrating that subcutaneous division of the trabecular tissue at the iris insertion is capable of producing quite satisfactory curative results. They also furnish me with proof that excision of the iris plays no active role in the operation for glaucoma. However, these modes of operation, uncertain in their results, have been entirely abandoned.

In two classes of cases I earnestly insist upon the avoidance of excision of the iris and the adoption of the simple section, and these are, when you are convinced that you have a case of hemorrhagic glaucoma to deal with, in this instance the double section, with a small sclerotome (2 mm.) affords you protection against the dangers to which you are exposed by the section for iridectomy; and in cases of absolute glaucoma, sclerotomy, by preference, should be employed where nothing more is thought to be obtained by the operation than relief from the violent ciliary neurosis.

In these cases, instead of enucleation, instead of making fruitless attempts to excise an iris completely atrophied, instead of producing the dislocation of a lens already threatened, and of inducing considerable internal hemorrhage, which will still further increase the pain, perform, without delay, sclerotomy, which can be repeated if necessary.

In conclusion, permit me to say a few words respecting the eserine cure in glaucoma. According to the purely empirical experiments which Laqueur has made in the employment of eserine in glaucoma, if atropine produced glaucoma, its antidote should cure it. Unfortunately, atropine, in certain cases, does certainly induce glaucoma, but eserine never restores such. This is readily conceivable, since the increase of intra-ocular pressure and the consequent impediment to absorption prevents the undoubted anti-glaucomatous efficacy of eserine. This efficacy

(*modus operandi*) is purely mechanical, and is effected, on the one hand, in consequence of the release of the iris-angle by means of the contraction of its sphincter, and of the recession of the periphery of the lens upon which the iris lies in consequence of the contraction of the orbicular portion of the ciliary muscle, and, on the other, upon the contraction of all vessels of the eye and the diminution of secretion resulting therefrom.

It seems to me that eserine should be employed in three classes of cases. 1. If by means of iridectomy or sclerotomy the pressure in a glaucomatous eye has already been somewhat diminished, then the use of this alcaloid will be of service. Hereafter no operation for glaucoma will be performed without the previous and subsequent employment of eserine. If iridectomy has not produced satisfactory results for vision, then we can adopt the eserine cure, with the simultaneous use of quinine. These modes of cure sometimes afford excellent results, and are especially to be adopted if the patient will not submit to a repetition of the operation for iridectomy or sclerotomy; but unfortunately they cannot be continued for a long time, since the conjunctiva will not tolerate the persistent use of eserine, as the condition of follicular conjunctivitis is speedily induced. In consequence of its irritant effects we are constrained to substitute therefor the instillation of the much milder but less active agent, pilocarpin, three instillations daily. 2. The use of eserine with the simultaneous use of quinine is especially indicated in the treatment of the antecedents (prodomata) of glaucoma. Since we know that in a case of acute glaucoma for which an operation has been performed an attack upon the other eye may readily take place (whether in consequence of sympathetic irritation, simultaneous congestion of the eye not operated upon, or of mental agitation), it is imperative that instillations of eserine in the eye not operated upon should be made during the first week after the operation. But I advise that these instillations should only be made before going to sleep in order that the effect of the myotic upon the sense of vision may not be perceived by the patient, and occasion him no unnecessary trouble. 3. The most advantageous employment of eserine is to protect the eye from consecutive glaucoma. We should never attempt to treat a rupture of the cornea in which the iris is engaged, whether it has occurred spontaneously or traumatically, without the systematic use of eserine. I have presented

to you a young man whose right eye had been wounded by a fragment of a round agate. The outer and inferior portion of the cornea and ciliary body in the same region were incised. For the removal of the injury to the iris the patient was treated for a long time with eserine and a compress bandage. A smooth cicatrix with satisfactory vision (since the lens was not injured) was the result of this treatment. A mild attack of serous iritis of a sympathetic nature which attacked the left eye speedily yielded to the use of eserine.

A great number of eyes can now be saved by the substitution of eserine for atropin in like cases. Since that mydriatic has, in extensive corneal ruptures, unquestionably contributed to produce consecutive glaucoma, and to promote the staphylomatous condition rather than to prevent it.

I close with some brief observations upon the treatment of absolute glaucoma. If the eye is very painful, and the seat of repeated attacks, by which the tension is much increased (internal hemorrhage), enucleation of an eye thus affected appears most advisable, though patients generally will not listen to such a suggestion. In this case sclerotomy and the establishment of a drain is indicated, but this can be employed only in patients whom one can have under his constant inspection, so that he can remove the gold thread as soon as it becomes a source of irritation like a foreign body.

Clinical Reports from Private Practice.

A PENETRATING WOUND OF THE BRAIN MADE BY A POCKET KNIFE.

By A. T. BARTLETT, M. D., of Virden, Ill.

A report of the following case may not be without interest, as it illustrates two important points, viz.: how formidable a comparatively insignificant weapon may be made, and the occasional absence of grave symptoms immediately following fatal brain lesions:

William Walters, aged 20 years, of sanguine temperament, medium size, in a fight with a young man on the night of June 8th, 1878, received an injury which, from the immediate effect, did not seem to be serious, as, after the affray, his hat was handed him, which he placed on his head and walked home in company with others, a distance of a block and a-half. From the evidence of two bystanders who witnessed the fight in the darkness, several blows were exchanged between the combatants after Walters received the one that proved fatal, as his hat, which fell at the onset, was cut at a point corresponding to the wound in the scalp. I saw the wounded man soon after he reached his home, at which time he presented such symptoms as might be attributed to concussion, and, upon examination, found a curvilinear opening nearly an inch in length in the scalp, on the left side, below the temporal ridge, from which arterial blood was flowing freely. The introduction of the finger revealed the fact that this opening extended through the radiating fibers of the temporal muscle in an oblique direction, and that the parietal bone had been perforated, and a piece of this bone, nearly seven-eighths of an inch long by three-eighths of an inch in width, beveled at the expanse of the inner table, was so nearly detached that I removed it without the use of instruments. This done, it became apparent that the blood was issuing from an artery within the cranium, and small masses of the brain were likewise escaping. To make a satisfactory examination, I enlarged the opening in the scalp and muscle in such a manner as to form a flap, thus exposing the opening in the skull, in doing which it became necessary to sever the posterior branch of the temporal artery, which I ligated. Upon the application of cold all hemorrhage, so far as could be seen, ceased. To determine the nature and extent of the injury to the brain seemed a perplexing question, as no one present could give any positive information as to the character of the weapon used. The external wound did not indicate it, and the hat worn gave no clue, though there was an

opening in it representing an angle of about ninety degrees, which appeared to have been made with a sharp instrument.

There was little room to doubt the presence of small spicula of bone within the cranial cavity, but my own experience in the treatment of severe injuries of the brain has had the effect to incline me to a course of "masterly inactivity" in these cases, and in this one I decided to act in conformity with the teachings of an eminent author of the day, who asserts that "all officious interference is to be avoided, inasmuch as it is far better to let the missile, and even detached pieces of bone, remain where they are than to search for them at the risk of severe additional injury." Therefore a compress, moistened with carbolized water, was applied, and the patient placed on the left side.

The dressings, next morning (the 9th), were saturated with blood that had oozed during the night, and on the compress was a mass of brain substance (gray and white) as large as a filbert. The patient was inclined to sleep, though easily aroused; temperature, normal; pulse, 68.

JUNE 10TH.—Symptoms much the same, except starts up from sleep occasionally; walks about the room; at times seems violent, and will not tolerate anything like restraint. Prescribed a mixture of chloral and bromide potas.; would not swallow it.

JUNE 11TH.—Pulse, 50; other symptoms unchanged.

JUNE 12TH.—Bowels moved, and less mental derangement. About this time there was protrusion of the brain, which was partially controlled by keeping a compress, like that applied at first, in position by means of an elastic band encircling the head. From this date there were no marked symptoms; the pulse ranging from 49 to 54 until the evening of the 14th, when the patient was seized with a chill, followed by high fever, rapid pulse and delirium. Previous to this he had rebelled against taking the little medicine that had been prepared, although he had taken considerable nourishment, and at times insisted upon sitting at the table. He finally consented, however, to take a dose of magnes. sulph. which acted promptly; ice was applied freely to the head, and in a few hours febrile excitement had disappeared and the case progressed without material change until the 18th. During all this time the bladder was evacuated regularly and normally; the patient did not fail to respond to questions, though the usual response was "yes;" and when asking for things he seldom called them by the right name. On the morning of the 18th, after a quiet night, the pulse was 52; respiration easy; temperature, normal; left pupil dilated; drank milk when put in the mouth. About 2 P. M. there was a sudden elevation of temperature, and in less than an hour the patient died.

At the post mortem and inquest held on 19th, it was proven that the wound had been inflicted with a common pocket-knife, (a like one being exhibted to the jury) with a blade two and one-

half inches in length and five-eighths of an inch in width. This had been driven into the brain its entire length—the direction being inward and downward and slightly backward. It was evident that a rotary, or perhaps, a slightly circular movement of the blade at the moment of its entrance gave to the cuts in the hat and scalp their peculiar appearance. The largest (posterior) branch of the anterior division of the middle meningeal artery had been severed, extravasated blood filled the track of the weapon and was diffused over a large portion of the lateral surface of the left hemisphere of the cerebrum, and the effusion was even more extensive between the dura mater and the skull, extravasated blood reaching to, and being diffused over a part of the middle fossa of the cranium; the brain substance immediately around the injury seemed softened, and for a much larger area was of a yellowish tint. The left lateral ventricle, near which the knife had passed, was filled with serum tinged with blood. A spicula of bone seven-sixteenths by less than three-sixteenths of an inch lay near the opening in the skull. There were no adhesions or other perceptible evidences of inflammatory action save those already adverted to.

CASE OF SYPHILITIC ULCERATION OF THE THYROID CARTILAGES, RESULTING IN DEATH. By Drs. BARTLETT AND DREYFUS, of Louisiana, Mo.

Mr.——, æt. 40, of ———, Ill., consulted us Jan. 22d last, for a throat affection involving total loss of vocal function. A brief history of the patient runs about as follows: Some nine or ten years ago he contracted syphilis, from which, however, he was fully assured by his medical attendant, that he had entirely recovered. During the interim and the time he first saw us (22d ult.), his general health was apparently good, with the exception of a very recent impairment of appetite. Family history good. He dates the origin of his present affection at about eight months ago, at which time he first discovered that he was becoming a little hoarse, which steadily increased up to the time when he first came under our care. His physician applied all means for his relief that his ingenuity could suggest, but all efforts proved futile.

Upon questioning him about the inception of his trouble, he could furnish us with nothing of interest further than that he first noticed the hoarseness already referred to; had no recollection of swallowing a foreign body; indeed, says he did not. Upon physical exploration, we found good vesicular resonance over the entire chest posteriorly and anteriorly, somewhat to our

surprise, considering the vast respiratory disturbance. On auscultation over the crico-thyroid cartilage, we discovered a very intense sibilant râle, which satisfied us fully as to where the difficulty was located. We then resorted to a laryngoscopic examination of the throat, hoping to gain some clue to the trouble, but were unable to get any benefit from this source, as we feared. The pharynx and larynx presented nothing abnormal save a very slight subacute inflammation scattered here and there. Having concluded that the case before us must be of syphilitic origin, we advised the following treatment: A direct inhalation of the vapor of tr. iodine ʒ½, alcohol ʒij, placed over a spirit lamp, together with:

℞ Potass. iod.....ʒiss.
Elix. calisaya bark.....
Tinct. cinchona comp.....
Syrup aurantii.....
Aqua cinnamoni..... aaʒiv.

Sig. Tablespoonful three times a day.

Our patient left for home the following day, assuring us that he would keep us posted as to the progress of the treatment. We heard nothing from him until the 7th inst., when he reappeared at our office, at which time there was a decided improvement in phonation, some words being quite audible but the difficulty of breathing had rapidly increased. We did nothing for him and the subsequent day advised his return home, as death was evidently rapidly approaching. He staid a day or two longer, however, in the vain hope of obtaining relief, when, on the morning of the 10th inst., he died very suddenly while lying down at his friend's house, where he was stopping. We were immediately advised of his death, when we expressed a desire to make a post mortem examination of the case, which was reluctantly granted. Having gained the consent of his friends, we at once repaired to the house, and, in the presence of Drs. S. B. Ayres and A. C. Lonergan, we proceeded to investigate the case. There was no cyanosis, but, on the contrary, his appearance gave forth evidence that the conflict was short, and devoid of all those agonizing scenes usually incidental to death from apnœa. Upon exposing the thyroid cartilage and trachea, nothing abnormal was appreciable. Upon opening the thyroid cartilage, however, we met with a very offensive phlegmonous ulcer about the size of a silver dollar, occupying the posterior walls (rather more on the left) of the cartilages, with a deep ulceration of the whole body of the cartilage. Several pieces of detached ossified cartilage were picked out, and one large piece was seen to be lying over the tracheal aperture, which, by the way, was diminished to about one-third its normal size, owing to the ulcer impinging on its caliber. This last named piece of ossified cartilage was, it is presumed, the immediate cause of death. As before stated, nothing worthy of note was observed elsewhere throughout the respiratory tract.

We have given the case in full, believing that, owing to the infrequency of such cases, it may prove of interest to our professional brethren, from whom any comments will be kindly received. We would add, before closing, our reasons for not performing tracheotomy in this case was simply for the reason that we could not expect to accomplish much, as well as there being some unfavorable considerations of minor import.

Reports from Hospital Practice.

CASES OF ULCERS TREATED BY DR. MARTIN'S "STRONG ELASTIC BANDAGE." By F. J. LUTZ, M. D., Surgeon to the Alexian Brothers' Hospital.

Perhaps no other class of cases have taxed the ingenuity of the surgeon and the patience of the sufferer more than "those chronic ulcers" of the leg. Every remedy which the materia medica possessed, and which was suspected of the slightest "healing" property was employed in the shape of ointments, pastes and powders. Roller bandages and the Baynton method were called in as adjuncts; the general condition of the patient was looked after and yet our best efforts were most frequently not crowned with success. So when Dr. Martin announced his mode of treatment before the Surgical Section of the American Medical Association, subsequently printed in the Transactions of that body for 1877, it was at once seized upon, both in this country and Europe. The principle upon which it is founded seemed rational and it was verified by the results obtained; and if we are to judge from the recorded experience of those who had an opportunity of testing the new method, it will in future replace all others in cases of non specific and varicose ulcers.

The bandage is made of pure rubber and varies in size according to the necessity of the case (the one applicable to the majority of the cases is ten and one half in length and three inches wide). It should be applied before the patient rises, and before the veins of the leg become distended by the impeded column of blood. Care should be taken that the bandage be snugly applied and it will remain in position all day. Before retiring it is removed, cleansed with tepid water and hung up to dry, and the ulcer covered with lint saturated with oil. During the day the patient may follow his usual avocation.

The following cases are published with a view to demonstrate

the superiority of this method, and to induce others whose lot it may be to meet with similar intractable cases, to give the "elastic bandage" a trial.

CASE I.—B. E——, a German, æt., 42; occupation, cook; was admitted into the Alexian Brothers' Hospital, May 21st, 1878. No venereal disease; has always enjoyed good health. About eight years ago, he says, an ulcer made its appearance below the outer malleolus of the left leg, which gradually increased in size, and for which he was treated by various methods. Examination revealed the short saphenous vein and its branches in a state of extreme varicosity; the ulcer is almost circular in form, about two and a half inches in diameter, and covers the external malleolus; its sides are perpendicular, at least one-half inch deep, and the edges white and hard, almost cartilaginous.

The ulcer was strapped according to the Baynton method, a roller applied over this and rest in the horizontal position enjoined. For several weeks this plan of treatment was continued, but the ulcer did not heal. Recourse was then had to various local applications and constitutional treatment, consisting mainly of bark and iron. Although his general health improved, the ulcer did not, for the sluggishness of the circulation in the lower extremity was increased by his walking about. As a *dernier ressort* the firm elastic bandage was applied, as directed by Dr. Martin, and to the great delight of my patient, as well as myself, the ulcer at once began to heal, and the patient, who had hitherto complained of a sense of fullness in the leg and who could walk about only for a short time without great pain, was on his feet all day. He was discharged Nov. 12th, 1878, with the ulcer completely healed, and was ordered to wear the bandage continuously as a preventive. Up to the date of this writing no relapse has occurred.

CASE II.—R. K——, a native of Switzerland, æt., 30; a brewer; was most severely scalded on the 24th of August, 1878; his back and right arm, but more particularly his right leg, being burned. On the following day he was admitted into the hospital and the burned surfaces covered with flour, a plan of treatment, which, whilst it is most soothing to the patient, is also to be recommended on account of its cleanliness. Considerable sloughing occurred, but subsequently the wounds healed very readily, except those of the lower extremity, where several ulcers with raised edges remained. These resisted most obstinately the various methods instituted for their cure. Besides this the leg was considerably swollen, and was very painful whenever the patient attempted to walk. A firm elastic bandage was ordered—after a few days the swelling had entirely subsided, the ulcers began to heal, and he could walk about without the slightest inconvenience. At present he is again at work in the brewery, his ulcers entirely healed, but he still wears the bandage because "the leg is weak yet."

Proceedings of Medical Societies.

LEWIS COUNTY MEDICAL SOCIETY

The Lewis County Medical Society met at Monticello, Mo., Feb. 17th, 1879, Dr. R. S. Briscoe, of Lewistown, in the chair.

Owing to the very unfavorable weather and the prevalence of pneumonia throughout the county, there was a small attendance of physicians.

After reading the minutes, and other preliminary business, Dr. W. S. D. Johnson, of LaBelle, introduced a very interesting case of hypertrophy of the heart, and gave a history of his patient, his trouble, and its treatment, and requested each member to examine it. This case elicited quite an animated discussion between Drs. Connell, Briscoe, Frame and Johnson.

Dr. J. P. Frame, of Gilead, read his notes on a case of irritable uturus, and its treatment, which was discussed by Drs. Pugh, Johnson and Frame.

Dr. Risk gave a case of lumbar abscess, with its history and treatment.

Dr. J. P. Frame gave a case of psoas abscess, with peculiarities and its treatment.

Dr. Johnson gave a case of hip disease, which had been treated for rheumatism, by a respectable physician, and warned the members to be careful in such cases.

Dr. Risk read notes of a case of puerperal eclampsia. Mrs. R——, aet. twenty-two, a small, delicate nervous woman, in the eighth month of her first pregnancy; received a fall about 6 A. M., Sept. 18th. She made no complaint until about 1 P. M., at which time she suffered from severe headaches, that came on and passed off at intervals of an hour or two. Then, nausea coming on, she stepped to the door for fresh air, when the headache came on with increased violence. She then took to her bed and immedidiately went into a most violent eclampsia. I was summoned, and arrived after the sixth convulsion. Consciousness did not return after the first spasm. There was no œdema perceptible; blood oozed from the mouth from injury of the tongue; breathing stertorous; pulse 120; no dilatation of the os; swallowed some liquids during the intervals of the spasm; administered chloroform freely, which prolonged the intervals, but would not stop the convulsions, which returned upon the least withdrawal of the chloroform. I called Dr. J. R. Lucas in consultation, who strenuously advocated Norwood's tinct. verat. vir., in 30 drop doses. This I thought was

heroic. But remembering that Dr. Southworth in the *Detroit Medical Journal*, Jan., 1877, says, "My treatment of the apopletic form is 20 to 30 drops of Norwood's tinct. veratrum viride, and repeated every half-hour if necessary." And Dr. Fordyce Barker, in the *Buffalo Med. and Surg. Journal*, March 1877, related a case, in which he "gave veratram viride, in 10 drop doses, and repeated in a half-hour, and controlled the convulsion after the second dose." Seeing that our patient was in extreme danger, we thought we were justified in a bold course of treatment, which was happily crowned with success. We gave but 20 drops of veratram and watched our patient closely. In 15 minutes she had a slight spasm, which soon passed off; pulse, 110, and more full; repeated veratrum in 30 minutes; in 10 minutes vomited a dark greenish mucus, and became more quiet; breathing better, pulse, 100. Again at the expiration of 30 minutes we repeated the veratram, giving a third time 20 drops. Thus within one hour we had given 60 drops of Norwood's tinct. veratrum viride, which I know to be of good quality, by using it before and afterwards. Half an hour later our patient was sleeping quietly; breathing good; pulse normal and remained mostly quiet during the night.

SEPT. 19th.—Consciousness returned, but somewhat dazed, and somnolent. She had no recollection of the previous night. Ordered rochelle salts, and light diet.

SEPT. 20th, 4 P. M.,—Found the pains regular and strong, pulse, 80, mind confused but conscious; os well dilated and labor proceeding normally; one hour later delivered a dead fœtus. She made a good recovery. In this case our treatment was certainly heroic; venesection was contra indicated; chloroform had virtually failed. Chloral, bromide pot. and morphine might have succeeded. Veratrum did succeed at least, *post-hoc*, etc. Remembering the rule laid down by Tyler Smith, "to adopt the course which seems least likely to prove a source of irritation to the mother." Gooch tells us to "attend to the convulsions and leave the labor to take care of itself." Schrœder says "especially no kind of obstetric manipulation is required for the safety of the mother." With this view of the case we made no attempt to forcibly dilate the os uteri or to precipitate the labor.

This case was thoroughly discussed by all the members.

Society adjourned to meet at Monticello on the 3d Monday in April.

R. S. BRISCOE, President.

R. C. RISK, Secretary.

SOUTH-EASTERN KANSAS DISTRICT MEDICAL SOCIETY.

In response to a call published in the newspapers to the physicians of South-Eastern Kansas, a meeting of physicians was held in the Court House at Girard, on the 7th day of February, 1879, for the purpose of organizing a District Medical Society, under the laws of the State of Kansas.

Whereupon W. W. Watkins, M. D., was called to the chair.

On motion, William H. Warner, M. D., was elected Secretary.

It was moved and seconded that the counties of Linn, Bourbon, Crawford, Cherokee, Labette and Neosho constitute, for the present, the territory of this District Medical Society, which was unanimously adopted.

It was moved and seconded that this meeting be a primary meeting for the purpose of appointing the necessary committees, and taking such other steps and measures necessary towards the perfecting of a permament organization at some future meeting. Adopted.

It was moved and seconded that when the meeting adjourn, it be to meet in the city of Fort Scott, on the first Tuesday in April *prox*, being April 1st, at 1 P. M., and that the Secretary of this meeting be instructed to notify, by letter or otherwise, the physicians of the several counties embraced in the district as above designated. Carried.

It was moved and seconded that the Chairman appoint a Committee on Constitution and By-laws and Rules of Order, and one on Articles of Incorporation, consisting of three members each. Adopted..

Whereupon the chair appointed on constitution, etc., B. F. Hepler, M. D., Wm. H. Warner, M. D., and J. H. Cushenberry, M. D. On articles of incorporation, F. F. Dickman, M. D., G. R. Baldwin, M. D., and J. H. Cushenberry, M. D.

These committees were ordered to report at the next meeting.

On motion, R. B. King, M. D., was elected Treasurer.

On motion, the meeting adjourned to meet at Fort Scott on the first Tuesday of April, 1879. W. W. WATKINS, Ch'n.

W. H. WARNER. Sec'y.

AUDRAIN COUNTY MEDICAL SOCIETY.

The Audrain County Medical Society met on the evening of January 24th, 1879, at the usual hour, the President, Dr. Macfarlane, in the Chair, and Dr. T. A. Keeton, Secretary.

This being the regular time for the annual election of officers (the sixth since organization of this Society), the following members were chosen for the ensuing year:

President—Pinkney French, M. D.

Vice President—T. A. Keeton, M. D.

Secretary—A. M. Patterson, M. D.

Treasurer—T. P. Rothwell, M. D.

Dr. Macfarlane, on retiring from the Chair, made a short and highly appropriate speech, urging the members of the Society to renew their efforts in the discharge of all their duties, and to be more punctual in attendance upon the Society.

Dr. French, the President elect, on taking the Chair, earnestly requested, in a few brief remarks, the hearty co operation of all the members of the Society, that he may be enabled to discharge the duties pertaining to his office faithfully and acceptably.

The following standing committees were appointed by the President:

Executive Committee—Drs. Rothwell and Keeton.

Committee on Ethics—Drs. Russell, Humphrey and Macfarlane.

The Executive Committee announced that a paper on some medical subject shall be read at each regular monthly meeting of this Society. Dr. Humphrey was appointed to read a paper on "Acute Pneumonia" at our next meeting.

On motion of Dr. Macfarlane the Secretary was instructed to furnish the proceedings of this Society, from time to time, to Dr. Rumbold for publication in the ST. LOUIS MEDICAL AND SURGICAL JOURNAL.

All business for the evening having been enacted, the Society adjourned to meet on the fourth Friday evening in February at the office of Dr. French.

A. M. PATTERSON, Secretary.

Periscope of Current Medical Literature.

PRACTICE OF MEDICINE.

RETENTION OF URINE RELIEVED BY CHLORAL.—Dr. Tidd reports the case of a young woman, in the ninth month of pregnancy, who had not urinated for twenty-four hours, as a result of which the bladder was enormously distended. Catheterization was tried but failed, in consequence of the swelling and of the deviation of the urethra. Puncture of the bladder was proposed, but the patient refused to consent to it. Ten grains of chloral were then ordered every half-hour; it produced a deep sleep, during which the patient passed unconsciously an enormous quantity of urine. The evacuation commenced five minutes after the second dose of the solution. The retention did not return and seven days later the patient was delivered of a healthy child.—*Jour. de Med. de Bordeaux.*

SUBCUTANEOUS INJECTIONS OF CHLORAL.—M. Besnier lays special stress on the necessity of burying the point of the needle in the subcutaneous tissue; he introduces the needle alone, watches it to see if any blood escapes (in which case he punctures in another place) and only finishes the operation when he is certain that the fluid will not be forced into a vein. In cases of sciatica, he injects on the first day one syringeful over the point of exit of the nerve, and another over the middle of its course. On the following day he makes another injection over the external poplitis. It is in tic douleureux, however, that he looks for the most valuable services from the injections.—*Lyon Med.*

DIAGNOSIS OF AMYLOID KIDNEY.—Albuminuria occurring in the course of long-standing suppurations, is too generally regarded as indicative of amyloid degeneration of the kidney; but chronic parenchymatous nephritis occurs under similar etiological conditions, and also gives rise to albuminuria. The difficulty of differentiating the two conditions is well known. Bartels points that the disgnosis depends upon the distinguishing characters of the urine, which in the former is clear, with little sediment and few casts, mostly hyaline, and scarcely ever blood-corpuscles. If the latter, it is always more or less turbid with considerable sediment; is dirty colored, contains many casts of every variety, and not uncommonly blood corpuscles. In those cases in which no albumen is present, there have been signs of amyloid disease in other organs; and, in order to escape error,

it will be enough to know that absence of albumen from the urine does not exclude a slight degree of amyloid disease of the kidneys.—*Brit. Med. Jour.* (*Med. Record*, N. Y.)

ESMARCH TREATMENT OF CANCER.—Give Fowler's solution, one drop three times a day for three days, then increase the dose by one drop every three days till intolerance of the remedy follows. Apply the following locally: Arsenious acid and muriate of morphia, each 0.250 gramme, calomel, 2.00 grammes, powdered gum arabic, 12.00 grmms.; mix. At first sprinkle only a little upon the ulcer, gradually increasing the quantity to a teaspoonful. This overcomes the odor, causes a hard eschar to form and healthy granulation takes place.—*Boston Jour. Chem.*

COUGH MIXTURE.—In any severe cough, when the tongue is red or the throat is sore, the following is recommended by Dr. Powell, of London:

℞ Potassii. chloratis.....grs. xl.
Morphia muriatis.....grs ij.
Glycerinæ.....℥ ss.
Syripi.....℥ iijss. M.

Sig. To be taken undiluted and slowly, for both its local and constitutional effect. Dose, one teaspoonful three or four times a day.

—*Br. Med. Jour.*

ACUTE NEPHRITIS.—J. H., aged 27, nativity, Ireland. Three weeks ago after exposure to cold while washing, she was taken with a rigor, which was followed by fever, some pain in the region of the kidneys and violent emesis; patient had almost a constant desire to urinate, but was unable to pass more than a few drops at a time. When admitted to Long Island College Hospital her face and limbs were badly swollen (œdematous); urine small in quantity, light in color, specific gravity, 1,009; upon the addition of nitric acid, one-half its bulk coagulated; microscopical examination showed a large quantity of epithelium from the tubes and urinary passages, as well as epethelial and blood casts; upon physical examination of lungs, numerous very fine, moist râles were found, showing œdema of the lungs; she also complained of pain in the chest. At 7 P. M., she was given fifteen minims. fluid extract jaborandi, to be repeated every hour until she should perspire; soon after the first dose she began to perspire, which soon became very profuse; at the same time saliva escaped from the mouth almost continuously; this continued for some hours. On the next day the patient felt a good deal better; no râles; no pain in the chest; repeated the same treatment this evening with like result; also used dry cups over the kidneys and lungs; examined urine, found it light

in color, specific gravity, 1,012; albumen about one-fourth of its bulk; she was put upon the following:

℞ Tinc. digitalis.....ʒij.
Sal. potassa citratis.....ʒij.
Infus. buchu, q. s. ad.....ʒiv.

Sig. Two drams every two hours.

On the ninth day rapidly improving; œdema had entirely disappeared.—*Med and Surg. Reporter, and Nat. Med. Review.*

CHLORAL AS A COUNTER-IRRITANT.—Among the many uses to which chloral has been put, we have not met before with the following from the *Bulletin Therapeutique*: Made into a mass with gum tragacanth, spread on a paper and applied to the skin, it will produce a blister without pain; applied as powder on cotton, it causes a painful burning sensation; by the former method a portion is absorbed and the patient falls asleep. Its action is not so uniform as cantharides, but as a mild visicant or an agreeable revulsion the writer would recommend such chloral paper to physicians, the more so as it will keep for months without losing its activity if well prepared.—*Druggist Circular.* J. M. S.

SURGERY.

CERTAIN ABSCESSES NEAR THE MARGIN OF THE ANUS.—(Prof. Verneuil, *La France Medical.*)—There exist, you know, two very distinct varieties of abscesses of the anal region. In the one the abscess occupies the ischiorectal region, but the purulent collection occupies the buttock and bulges; here the rectal wall is unaffected and is not laid bare at any point. In the other variety, on the contrary, the pus does not point toward the buttock; there exists only a slight tumefaction, a little redness and heat in this region; the purulent collection has destroyed the perirectal cellular tissue and burrows and points in this direction. In the first variety of abscess the pus has a tendency to find exit in the region of the nates; in the second, it tends to ulcerate through the wall of the rectum and to open into its cavity. From this difference of seat important therapeutic consequences result, and it is my object to lay before you. In the first case a simple incision of four or five centemetres (1½ to 2 inches) practiced in the direction of the anus, generally suffices for the evacuation of the pus; cicatrization then rapidly follows without leaving any traces of a fistula behind. In the second case, if the rectal wall be bulged or bored, even a larger incision is insufficient, and fistula inevitably occurs (cases in point are here cited, after which he continues). As soon as I find the pus pointing towards the rectum I incise not only the abscess in the

region of the buttock, but I also, and at the same time, do the operation for anal fistula. In these cases I puncture the purulent collection, and introduce a grooved director, which I make to strike the rectal wall so as to bulge and perforate it at a point as far as possible above the part laid bare; I then bring the director out through the anus and divide by means of the thermo-cautery all the bridge of tissue between the two openings. * * * * * * * *

The only objection which can be taken to our procedure is that the operation is a little longer and a little more serious than simple incision, but to that we may reply that the duration of the treatment is ultimately infinitely shorter than with a simple incision.—*Extracted from the Canadian Jour. of Med. Sci.*

[This treatment of perirectal abscess is not new, for Van Buren, in a pamphlet published in 1870, on pages 60 and 61, discusses the question, "whether, with the almost certain result of a fistula in prospect, it would not be better for your patient that you should complete the operation for its cure at once? My experience would lead me to answer this question in the negative. It is the wiser course to simply open the abscess, and take the chance, poor though it be, of its healing. When the indolent sinus shall have formed, all the inflammation having subsided, you will probably secure a more prompt result by operating for the cure of the fistula." I quote thus at length to show that this has been practiced more or less by American surgeons for many years. I have frequently seen the operation performed in the manner described by Prof. Verneuil, and with good results.] H. H. M.

OBSTETRICS.

A NEW BINDER.—Dr. Vacher in the *Obstetrical Journal* (*G. B. I.*) calls attention to an "abdominal shield for improving the obstetric binder." He claims that the ordinary appliances, whilst strongly indicated, have fallen into disrepute chiefly through their inefficiency. The Doctor's improvement consists of a "shield" cushioned with rubber air-bags, so constructed as, by means of a spring, to clasp the uterus after the manner of the hand externally applied. This is kept in position by an external coursing, such as the ordinary binders with two stays as stiffeners in the rear, to prevent its rolling up from the hips.

DEVELOPMENT OF THE GRAAFIAN FOLLICLES DURING PREGNANCY.—Contrary to the opinion then prevailing and contrary to that now generally taught, the venerable Prof. Chas. D. Meigs used to contend that the development of the Graafian fol-

licles continued uninterruptedly during pregnancy. This opinion has been confirmed by some researches and post mortems made by Dr. Slaviansky, which we find in the *Med. Centralzeitung*, Oct. 30th. A woman of twenty-four years, who died suddenly in the third month of pregnancy, displayed follicles on the point of bursting and recent corpora lutea. This may be said to decide a question of considerable physiological interest.

PENDULOUS UTERUS AT FULL TERM OF PREGNANCY—COMPLETE ANTEVERSION AND ANTEFLEXION.—At a recent meeting of the obstetric section of the New York Academy of Medicine, Dr. Isaac Taylor presented an illustration and gave a history of a case in which there was complete anteversion and anteflexion at the full term of utero-gestation—the uterus covered with the pendulous abdominal walls and hanging between the thighs. This case was the more interesting in consideration of the youth of the patient, who, although mutiparous, was only 22 years of age. This was the second case of the kind which Dr. Taylor has seen during a long and large practice. W. C.

GYNÆCOLOGY.

DISEASES OF WOMEN.—At a recent meeting of the Cincinnati Obstetrical Society Dr. Palmer read a paper on "Tapping of Ovarian Cysts," an abstract of which is as follows:

"What are the results which, from our present standpoint, may be expected from tapping? To what extent do these warrant the continuance of the same?

He referred to the great variety of opinion expressed by authorities, viz: Boinet, Kiwisch, Atlee, Spencer Wells, McDowell, Simson, Nussbaum, Thomas, Peaslee, Hegar, Spiegelberg, Storer, and Stilling. Only two of these never tap; the remaining ten tap with varying frequency for diagnosis or treatment. Most regard the operation as attended with danger.

He endeavored to answer the above questions by reviewing the objects sought for in the operation, together with the results which may follow.

These are, 1st, diagnosis of the tumor; its nature, character of contents, number of cysts, attachments, etc. Of great importance in some cases, essential in a few. Increasing experience diminishes, however, this necessity.

2d. Palliation. In the vast majority of cases, although, perhaps, gratifying at first, is of short duration, and as a rule very unsatisfactory.

3d. Cure. This effect is most likely to follow tapping in (*a*)

parovarian cysts; next in (*b*) unilocular cysts of the ovary proper; next in (*c*) paucilocular cysts; and last in (*d*) multilocular cysts. In the first, cure occurs as a rule; in the second and third varieties, it by far more frequently fails, and in the last, failure is certain.

What are the dangers of tapping?

1. Homorrhage. A possible accident with best care, and whatever trocar. Fatal case occurred in hands of Peaslee; others reported by Spencer Wells and Kiwisch.

2. Shock.

3. Inflammation of the peritoneum. The greatest of all dangers, due in most instances to a passage of cyst-contents into the peritoneal cavity. Peritoneum exceedingly sensitive to presence of foreign substances. The contents of multilocular cysts most injurious.

4. Inflammation of cyst-wall. The result of trauma, entrance of air into its cavity. Takes place more frequently than is supposed.

5. Septicæmia. Stands second in the order of frequency among dangers.

6. Rapid refilling of the cyst, and consequent drain of the general system. Cysts, although unilocular, may refill with surprising rapidity, amounting to several gallons of fluid within a few weeks to a few days. The drain is a source of no inconsiderable danger. A hectic, phthisis, amyloid degeneration of internal organs may follow.

Not a few cases in fair condition for ovariotomy, prior to or soon after a first tapping, have been permitted to become weaker and more exhausted under increasing drain, until a radical operation offers only a forlorn hope.

Mortality of tapping:

Simpson calculated it was not less than 1 in 6.

Dr. Fock's table of 132 cases showed 1 in 5½ cases, in from a few hours to a few days.

Kiwisch's analysis of 130 cases give 17 per cent. of death within a few days.

Southam 20 cases, 4 died within four hours and 3 within first month.

Meigs put mortality at one-half.

T. S. Lee's table, 20 cases. Ten died within seven days, and 2 within two weeks.

Peaslee thinks if statistics were made up from cases in hands of the general practitioner, no better results could be shown than in tables of Fock and Lee. He concludes that the tapping of polycysts is attended by a mortality of at least 50 per cent.

The danger, as experience proves, is not limited to polycysts. Peaslee, a strong advocate for tapping of monocysts, states he has lost 4 such out of 63.

Other proof is abundant.

Aspiration does not diminish these dangers. In the hands of Peaslee, Hegar, Munde, Lusk and others, very serious and fatal results have followed aspiration. Nor is the hypodermic syringe free from danger. These few cases already reported are undoubtedly but a small proportion of those repeatedly happening.

CONCLUSIONS.—In balancing the results for good and bad, it is not difficult to determine which outweighs. For remedial purposes, the ill effects of tapping so greatly preponderate, both in number and degree, that there is no doubt the number who have died within a few days after tapping is so far in excess of those cured by the operation, as to leave a very unfavorable showing for the latter.

Notwithstanding, however, the risk of the operation is heavy, and the ultimate permanent good promised is small, the urgency for immediate relief may be so great as to render it justifiable. Life may be held in extreme jeopardy from the dyspnœa, pain, vomiting, and urinary suppression—the effect of pressure of a developing cyst. Unless relief is speedy, the patient dies; she is, however, too feeble to render ovariotomy at all advisable. Better tap for its immediate effect, in hope the patient may rally, and a future condition be more favorable for the removal of the cyst.

Aside from tapping in the very few such cases, it should be limited, with a view to remedial effects, for obvious reasons, to well-defined parovarian cysts. Here the danger is at a minimum, the prospects of permanent benefit at a maximum. But in view of the fact that a vast majority of tappings even in monocysts prove unsuccessful as to cure, and may, regardless of the method of puncture employed, be fatal, the operation, save under the above rare exceptions and conditions, should be abandoned. And in view of the greatly increased danger of puncture of polycysts, the observance of this rule with them is more urgent, and should be more rigid.

For the purpose of diagnosis, the line of duty of the operator, from our present standpoint of facts, is equally clear and well defined. Is one justified in incurring the risk attending tapping for the sake of diagnosis? He must know, if he has acquainted himself with the literature of this subject, that he may bar himself the privilege of affording the only hope of his patient's recovery—ovariotomy To endanger life, it may be unnecessarily, and deprive that life of the only chance for a restoration to health, is a fearful responsibility.

Past experience clearly should influence the surgeon to limit tapping, for the purpose of diagnosis, to the smallest number of cases, and then only under the circumstances of imperative necessity, by reason of special obscurity in diagnosis. If the diagnosis is reasonably clear and certain, tapping is unnecessary and unjustifiable. If practiced by reason of doubt, and such a cir-

cumstance may render it permissible, it should be with the full understanding that on the first appearance of symptoms of mischief, the final operation is to be proceeded with. For this, previous preparation is to be made, that no delay is had. Peaslee offers this prudent advice. This is the only safe course of conduct with monocysts. With polycysts, however, it is hazardous to wait for the appearance of unfavorable symptoms. Since these symptoms occur in the majority of cases of first tappings of this variety of cysts, and according to statistics are followed by fatal termination in fifty per cent., there should be no delay. As soon as the character of the polycysts is determined by a withdrawal and examination of the fluid, and conduct of the cyst remaining, the whole tumor should be removed. The TWO OPERATIONS ARE ONE and at THE SAME TIME.

Ovariotomy has quite frequently been performed while coexisting inflammation of the peritoneum and cyst following tapping was progressing. While such conditions materially increase the mortality of the operation, they by no means render it hopeless. Successful cases have happened in the hands of Spencer, Wells, Keith, Thomas, Peaslee, Emmett and Goodell.

In conclusion, the life of not a few suffering women, hopelessly donmed save for ovariotomy, is best promoted by limiting tapping to a minimum, and then only for the strongest reasons." —*American Journal of Obstetrics*, October, 1878.

[MECHANICAL SUPPORT OF THE UTERUS.—Dr. Thomas Addis Emmet, Surgeon to the Women's Hospital of the State of New York, in his original and able paper, entitled the "Philosophy of Uterine Disease," speaks thus of mechanical means for the relief of uterine displacements. This paper of Dr. Emmet, published in the *New York Medical Record*, is replete with useful information. We extract these paragraphs on mechanical support, as especially practical and eminently true. It is valuable testimony from a high authority, concerning a remedial measure, in the use of which there is no well settled policy, and much conflict of opinion:]

"We will now consider briefly the mechanical means to be resorted to for the relief of displacements. I am ignorant of any instrumental means, safe or reliable, for correcting the position of an anteverted uterus. Great relief may sometimes be obtained, on increasing the degree of anteversion, by the use of a pessary with a long enough curve in the posterior *cul-de-sac* to lift the neck of the organ from the floor of the pelvis On thus slinging the organ, as it were, with the fundus resting against the pubis and the cervix elevation, the circulation will be improved, and the irritability of the bladder lessened. We gain time by this means, and enable the patient to take more exercise, since we break the force or jar which would be otherwise transmitted to the organ so long as the cervix rested on the floor of the pelvis. The various devices for forcing the

uterus into an upright position to a point which the organ likely never occupied even when in a healthy state, are faulty in theory and wrong in practice. If we can lift, by any appliance, the uterus to a point where the obstructed venous circulation can be relieved through the neighboring tissues, which have been put on the stretch by the sagging organ, it is all that can be accomplished by such means, and the mere anteversion is of no consequence. Any instrument making direct pressure on the anterior wall, the chief seat of disease and the point of greatest tenderness, must prove a source of irritation. I deprecate even more the intra uterine stem-pessary, for, had this instrument been the device of the Evil One himself, its use could not be productive of more danger. Its use in a flexure seems as rational as would be the introduction of a straight steel sound into the urethra for the relief of an existing chordee; the penis might be straightened by force, but the cause of difficulty would certainly not be removed. The treatment of retroversion of the uterus is more satisfactory, mechanical means can be better applied, and the good resulting from relieving the obstructed circulation is well marked on restoring the organ to its natural position. A recent case of retroversion can be reduced with comparative ease, and an instrument can readily be adjusted which will keep the organ so far anteverted as to render it difficult for it to return to its former position. If, however, the displacement has been of long duration and the uterus has become flexed, the condition will, in all probability, have acted as a source of irritation in causing cellulitis to a greater or lesser extent. Even should adhesions not have formed, a degree of congestion will have been kept up so as to require but a slight provocation to establish a fresh attack of inflammation. It is, therefore, wise to proceed with the greatest caution in any attempt at reduction until we have fully appreciated the condition. Should we find the uterus firmly bound down by adhesions, it can be replaced in time, for with care, patience, and good judgment, in not attempting too much in a single effort, these bands will gradually become so stretched and attenuated as to offer no longer any resistance. The utero-sacral ligaments, in a state of health, are scarcely worthy of note, being formed but of a reduplication of the peritoneum and a little cellular tissue. These, however, become frequently thickened, and having closed partially over an enlarged and retroverted uterus, can be readily mistaken for adhesions, in consequence of the obstacle they sometimes present in an attempt to restore this organ to its normal position. I have long accustomed myself to rely on the index-finger for the reduction of this displacement, and with a little practice it becomes the most reliable means we can employ. It is one certainly attended with the least risk, as we are able to appreciate at once the point and extent of resistance. When we have once ascertained

the fact that there are no adhesions nor lurking inflammation in the neighboring cellular tissue, an experienced operator may, with comparative safety, use the sound or any other means to which he has been accustomed. But the method which I will describe is attended with less pain, and I believe with the least danger, under all circumstances. The patient is to be placed on the back, with the knees flexed, and the hips drawn down to the edge of the operating table or chair. Introduce then the index finger into the vagina, and direct the point of a tenaculum, which is to be hooked into the posterior lip, just within the os. This instrument is to be used for the purpose of gently drawing forward the organ, sufficiently toward the vaginal outlet, that we may be satisfied the fundus is distant enough from the hollow of the sacrum to pass the promontory when elevated. At the first attempt this must be done with care, and if a point is reached at which great pain is caused, we must then desist. By this maneuver the uterus has, of course, become more retroverted than before. To correct this, the perineum should be pressed firmly back, that the finger in the vagina may be passed as far up behind the uterus as possible, and made at the same time to lift up the organ. When the uterus has been thus elevated, and while it is being held up by the finger, the cervix is suddenly carried in an arc of a circle, downward and backward, by means of the tenaculum held in the other hand. By aid of the finger in the vagina, the fundus has been pressed up against the utero-sacral ligaments. These ligaments, having been put slightly on the stretch, gape as the tension is suddenly relaxed by carrying the cervix backward, and the fundus slips between them. The finger must be then placed against the anterior lip, the tenaculum withdrawn, and the organ anteverted by passing the finger repeatedly down the anterior face of the uterus, so as to press the cervix downward and backward into the hollow of the sacrum. If an unusual degree of pain is experienced at any point, we must use our judgment as to how far it may be safe to proceed, or desist entirely for the time being, until all active symptoms have subsided under the proper treatment. When successful, I frequently make no attempt, by mechanical means, to hold the uterus in position, until I have again replaced it and satisfied myself that no tenderness on pressure exists at any point which would come in contact with the pessary to be used. The form of the instrument should be adapted to carry the cervix well back, and with a sufficient curve in the posterior *cul-de-sac* to keep it elevated, so that the organ must remain anteverted. I have been consulted, more than on any other point, as to the best form of pessary to be used in practice. A difficult question to answer, as there is some individual peculiarity about nearly every case, on the appreciation of which to a great extent success will depend. Some modification of Hodge's closed lever pessary, however, will be found applicable to the largest number

of cases, as it conforms more than any other to the natural shape of the vagina. A pessary, to do no harm, should be small enough to admit of the passage of the finger between it and the vaginal wall at every point, while the patient lies on the back.

It must be just large enough to give the needed support to the uterus, and be at the same time small enough for the vagina to regain gradually its natural size. The elasticity of the canal is sufficient to admit of a dilatation to the extent of the pelvic excavation; but it will prove an exception to the rule if a pessary, properly curved, need ever be over three inches in length and an inch and a-half in width. Whenever it is possible to avoid making the pubis the chief point of support, I do so. But it is often unavoidable in cases of long standing retroversion, where the anterior wall of the vagina has become shortened in consequence, and in cases of prolapse of the posterior wall, from laceration of the perineum. But where the vaginal outlet is not too large, and the posterior *cul-de-sac* is of a natural depth, the principle of the lever-pessary is applicable to nearly all cases. The fulcrum of this double lever rests on the posterior wall of the vagina at the bottom of the *cul-de-sac*. It should be so curved in reference to this *cul-de-sac* and posterior wall at one extremity, and at the other end bent with a lesser curve in the opposite direction, so that the instrument may be balanced. As the patient stands on her feet, the weight of the uterus will cause the other end of the instrument to rest against the anterior wall of the vagina, near the neck of the bladder. On assuming the horizontal position, the instrument will present in the axis of the vagina near the outlet. It will thus compensate itself by a change of position, so that it cannot, from continued pressure at one point, cut into the vaginal tissues. A longer curve will be needed in the *cul-de-sac* where retroversion has existed, than with prolapse from hypertrophy, where the object is simply to lift the organ from the floor of the pelvis. In the latter condition, the upper portion of the vagina will be more dilated, as a rule, than the lower part, and the instrument must be made to correspond. The closing in of the vaginal walls around an instrument, made larger above, has the effect of crowding it upwards in the canal. When even the outlet is larger than natural, and dilated from a prolapse of the vaginal walls, we must restore the canal to a natural size and close the laceration through the perineum, by a surgical operation, before an instrument can be worn with advantage for correcting the retroversion. An instrument, under the circumstanees, to be used as a temporary means of relief, must be made wider below, with the greater curve also at this point, so as to get the needed support from behind the pubis, and with a depression to guard the neck of the bladder from pressure. We find occasionally a difference in the curve on each side of the symphysis, so that, if an instrument is made symmetrical, it will bury and cut into the

soft parts covering the lesser curve. On the corners of the instrument there should be no sharp angles, but a gradual curve; frequently it is necessary to bend the corners downward, to correspond with the roof of the vagina at this point. In the posterior *cul-de-sac* the instrument should never be so abruptly curved as to make pressure directly against the uterus at its junction with the vagina, but at some little distance beyond. The circulation in the neck is easily obstructed by pressure at this point, so that it will soon cause an erosion about the os; and frequently an intolerance to the presence of any instrument in the *cul-de-sac* becomes established, in consequence of irritation or inflammation of the lymphatic glands found in this neighborhood.

The shorter the vagina, the straighter must the instrument be made, for if curved too much it will rotate and remain across the axis of the canal. A straight instrument has to be wider in the middle, in proportion to its length, than a curved one. The widest part of the vagina is from one sulcus to the other, while the lateral walls and posterior surface of the canal form a concavity; consequently, a curved instrument should be made rather smaller in the middle, as its support is chiefly derived from the posterior wall. It is a very common occurrence to find an instrument, when too wide, cutting its way along the lateral walls of the vagina, at the bottom of a deep fold formed as the pessary is carried downward from the pressure above. It may be accepted as a rule that, so long as a patient can recognize from her feelings that she is wearing an instrument, it either does not fit, or she is in no condition to wear one; and in either case it will do her harm. So soon as an instrument has been properly adjusted, and there is no tenderness on pressure at any point in the vagina coming in contact with it, the patient will be unconscious of its presence. I prefer at first the use of block tin rings, on account of their greater malleability. After modeling one of a proper size to the case, and having fairly tested its use, I then have the instrument reproduced in aluminium, silver gilt, or hard rubber. These are, in brief, the main points to be observed in adjusting a pessary properly, but in each case there will be a necessity for some modification in consequence of individual peculiarities. Success will depend entirely on an accurate appreciation of these differences, and on the mechanical skill innate to the operator. To a want of both or of either gift, must be attributed the unsatisfactory results so often complained of.

THE OXALATE OF CERIUM IN PREGNANT SICKNESS.—Dr. Francis Edward Image writes to the *Practitioner*: Sir James Simpson introduced the oxalate of cerium and prescribed it in ten grain doses. The officinal dose is from one to two grains, which is, as a rule, so useless that the preparation has been stigmatized as the "oxalate of mud." As a general practitioner of several years' standing, very many cases of pregnant sickness have naturally

come under my care, and up to the present time I have not met with a case in which the nausea has not been very considerably relieved, and in most cases completely checked, by ten-grain doses of the oxalate of cerium. I have at the time of writing this a lady under my care who, from the fourth week of her pregnancy till now, the eighth month, has suffered at intervals from this distressing symptom, but whose sickness has been invariably checked by from two to three days' administration of the oxalate in the dose I have mentioned. In severe cases I give it every four hours for the first day, beginning the first dose half an hour before the patient rises, and then, as improvement takes place, diminishing it to three times a day, but always giving the first dose of the day before the patient moves from the horizontal position—a point to which I attach much importance. The formula I employ is—

℞ Cerii oxalatis.....grs. x.
Pulv. trag. co.....grs. x.
Tre. aurantii.....ʒ ss.
Aquam. ad.....ʒvj.

In Dr. Frowert's case he prescribed 1½ grain doses, which were not "followed by the slightest remission of symptoms." I hold that this want of good result was from the insufficiency of the dose.

The oxalate of cerium I have also found most efficacious in restraining the nausea resulting from uterine irritation. I generally combine it with bromide of potash in these cases, but have found it to succeed in combination where the previous employment of the latter drug by itself has been without appreciable effect.—*Canada Med. Rec.*

OVARIOTOMY DURING PREGNANCY.—The author, (Heywood Smith, M. A., M. D.,) narrated the case of a woman, aged 25, pregnant with her fourth child, the subject of an ovarian cyst, noticed after her previous confinement seven months before, who came under his notice on March 25th, 1878. He removed the tumor antiseptically on June 12th, the patient then being about four and and a-half months pregnant. The adhesions were strong to the abdominal walls. The pedicle was tied with silk; and she left the hospital in twenty-eight days, the pregnancy not being disturbed. The temperature never rose above 99.8° Fahr. He justified the operation by the consideration that, with any other method, whether by letting it alone, or tapping, or the induction of premature labor, the cyst would still be left to be dealt with, and there would have still been risk of miscarriage; and also by the fact that Spencer Wells' statistics of ovariotomy, during pregnancy, had given such good results. His prognosis was verified by the favorable issue.—Mr. E. Smith (Bolton) did not consider the patient would be worse off if she aborted, had the operation not been performed.—Dr. Griffith (Swansea) wanted to know if it

were conjunctive that cysts burst during labor; and asked what was the risk of allowing the patient to go her full time. He drew attention to the frequency with which patients menstruated eight or nine days after ovariotomy.—Dr. Marion Sims said that his second case of ovariotomy was pregnant three months.—Dr. H. Smith, in reply, said that the so-called menstruation arose from a general hyperæmic condition—from the super-abundant energy of the circulation that had, before the operation, been utilized in supplying the tumor with blood; and that, on the removal of the tumor, the heart did not all at once accomodate its work to the lessened range. Hence also arose the albuminuria and the presence of urates on the third day after ovariotomy. He considered in his case, as the tumor was large and growing, that there was less risk to the patient from the operation than if she had been allowed to go her full time.—*Hosp. Gaz.*

IMPREGNATION OCURRING WITHOUT INTRODUCTION OF THE INTROMITTING ORGAN.—Dr. Chas. Roth, in *Medical Record* of 30th November, reports a case where sexual intercourse was impossible because of an excruciating vaginismus. In the attempt at coition the semen was discharged on the external genitals, the spermatozoa found their way into their natural destination, and pregnancy occurred. This case is important in a medico-legal point of view.—*Louisville Med. News.*

A DICEPHALUS MONSTER.—It will be remembered that some months since it was announced that a double female monster of the dicephalus type had been born near Montreal, in Canada. This remarkable monstrosity has been recently on exhibition in New York, and excited much interest among the profession. It is known as the "St. Benoit Twins." The twins are called Rosa and Mary, and they are now seven months old. They have two perfectly formed and natural heads, and two bodies also as far as the last rib, but below that both are fused into one. They have four arms, only two legs, and each child has the control of but one of them. As far as the natural functions of life are concerned, each is almost entirely separated from the other, and one may be sleeping while the other is laughing, crying or nursing. They have but one abdomen, one umbilicus, one vagina and one rectum; although the stomachs, and some, at least, of the other abdominal viscera seem to be separate. There was no physician, and not even a professional midwife in attendance; only an ordinary female friend, assisted by the mother, were present at the confinement. One of the heads presented first, and after that was delivered, the body belonging to it followed. Next came the body of the second child, with two legs doubled up alongside of it, and finally the head of the second child. They are now really fine-looking children, and apparently perfectly healthy, although one of them seems to be somewhat larger and better developed than the other.—*Extract from letter in Boston Journal.* W. L. B

THERAPEUTICS.

COPAIBA IN CIRRHOSIS AND JAUNDICE.—The value of copaiba as a diuretic and cholagogue is not sufficiently appreciated. The following case, reported in the *British Medical Journal*, by Dr. B. J. Massiah, illustrates it: W. D., aged 37, a clerk, was a spirit drinker for four years, seven years ago, and during the last four years and a-half has had three prolonged and painful attacks of jaundice, with ascites and œdema of lower limbs. On admission, three months ago, he was tawny, thin, rather weak. He complained of constant pain in the umbilical and lumbar regions. His fluctuating abdomen measured thirty-four inches in circumference, and the vertical hepatic dullness in the nipple-line was three inches. The urine was scanty, bilious, and exalbuminous.

During the first month he took bitartrate of potash and compound jalap powder; and the abdomen increased two inches, the urine remaining scanty. Then, under a scruple of copaiba thrice daily, it rose on successive days, from one pint in twenty-four hours to three, four and five pints; while the ascites began to subside. Once, for a fortnight, he took half a dram of tincture of belladonna thrice daily, for the abdominal pain, and the quantity of urine fell below two pints daily. Since then, he has returned to the copaiba, and his urine has averaged three or four pints daily. The abdomen now measures thirty-three inches in circumference, and his general health is much improved.—*Med. and Surg. Reporter.*

STRYCHNIA—ITS ANATOMICAL AND ITS PHYSIOLOGICAL EFFECTS UPON THE BRAIN, SPINAL CORD AND NERVES.—Dr. W. H. Klapp (*Journal of Nervous Diseases*, October, 1878) details at length some very elaborate experiments made upon the above topic. The care and skill exhibited lead us to the belief that his conclusions are approximately correct. They are: (1) Strychnia produces no appreciable primary lesion of nerve substance proper; that secondary lesions are produced—granular degeneration—by the engorgement of the vascular system, and that this is more marked in the brain and cord than in the nerves. (2) The convulsions of strychnia are not cerebral, and they are much more severe after the ablation of the cerebrum owing to the removal of Setschenow's ganglia. (3) Strychnia does not affect either the sensory or motor nerves at their periphery. (4) Both sensory and motor nerves in their course are unaffected by strychnia. (5) The tetanus-producing power of strychnia has its only action in the gray matter of the spinal cord. (6) In small doses the primary action of strychnia is to excite the vaso-motor center, causing thus a rise in the arterial pressure, and secondarily to paralyze this center, and hence to supplement this rise by a fall. (7) In large doses the vaso-motor center is immediately

paralyzed. (8) The slowing of the pulse produced by the exhibition of strychnia to both warm and cold-blooded animals is in neither case produced by any action on the central or peripheral ends of the pneumogastrics; but in warm-blooded animals is due to action on the excito-motor ganglia of the heart, and in cold-blooded animals is due to action on the ganglia situated in the sinus venosus. (9) The main vaso-motor center for strychnia is situated in the medulla oblongata, but simpler centers exist in the spinal cord. (10) The pneumogastric nerves are *not* paralyzed by strychnia in either warm or cold-blooded animals. (11) Strychnia decreases the number of respiratory movements; at first from too litle blood, and afterwards from too much blood flowing to the respiratory centers. (12) The decrease is not due to any action of the pneumogastrics. (13) Artificial respiration always moderates and sometimes stops the spasms; and this power is due to a maintenance of the oxygenation of the blood until the poison can be eliminated, and is not due to a reflex stimulation of the pneumogastrics.—*Detroit Lan.*

THYMOL AND ITS USES.—As an antiseptic, thymol is much more powerful than phenol or cresol (carbolic acid). Ranke uses a solution of one part thymol to one thousand parts water, instead of the carbolic solution of Lister. Dr. B. Kussner, of Halle, has tried it internally. In doses of three to five drops of a one per cent. solution he found it useful in the diarrhœa of children. An inhalation of one part to one thousand of water reduced the fever and expectoration in a phthisical case.

Animals poisoned with thymol sink into a profound coma. After death their blood is dark and fluid. Fatty degeneration of internal organs is, however, not found. Injected into the veins it lowers the temperature and induces stupor.—*Med. Surg. Rep.*

J. S. B. A.

DISEASES OF THE NERVOUS SYSTEM.

WESTPHAL'S DIAGNOSTIC POINT IN LOCOMOTOR ATAXIA:—Prof. Westphal about a year ago asserted that he had discovered a pathognomonic sign of sclerosis of the posterior columns. It is a very simple one. When in health, sitting with one knee across the other and the foot of the uppermost leg freely suspended, it is well-known that a smart tap with a narrow instrument, such as a ruler, delivered on the tendon of the quadriceps, just below the patella, will cause the foot and lower leg to spring up with a jerk. Well, Dr. Westphal maintained that this jerk does not oc-

cur in posterior sclerosis, and that its absence is a sure sign of the presence of that formidable disease.

His conclusions were attacked by several observers at the last meeting of the British Medical Association; and it seems pretty clear that his statement requires modification. No doubt the absence of this involuntary act is a significant sign of some important organic change. A new study of it has been made by Dr. S. Tschirjew in the *Archiv fur Psychiatrie*, and with great accuracy. The clinical result he reaches is that the absence of the reflex motion in man points to degeneration of the posterior spinal roots and columns at the level of the third and fourth roots of the crural plexus; but that in degeneration of the columns which does not reach so low as this the reflex phenomenon may appear. This very interesting result vindicates the symptom as of great importance.—*Med. Surg. Rep.*

CURARE IN EPILEPSY.—In the opinion of Kunze we possess in curare a remedy by means of which we may cure cases of epilepsy of long standing. He employs a solution of seven grains of curare in seventy-five minims of water, to which he adds two drops of hydrochloric acid. At intervals of about a week he injects beneath the skin eight drops of this solution, and in various cases in which convulsions had occurred for several years, he obtained a complete cure after eight or ten injections.—*Canada Med. Rec.*

URTICARIA—BISULPHITE OF SODA.—Dr. Carter, Mt. Jackson, Ind., states that the hypodermic injection of a saturated solution of bisulphite of soda in urticaria is the most prompt remedy in relieving this troublesome affection he has yet tried. It appears to act upon the periphery of the cutaneous nerves as does belladonna, except that the latter has a heating and the former a cooling effect.—*Med. Brief.*

TREATMENT OF SEVERE BED-SORES.—Dr. Dyce Duckworth (*Archiv. Dermatology*) communicated to the Am. Derm. Ass. meeting of 1877, a short paper on this subject. He recommends that, in addition to the use of the water-bed, the patient should lie with the buttocks and sacrum constantly upon poultices. These should be made of linseed, and if there be much discharge or fœtor, the cataplasma carbonis should be use. They should be made of pure linseed, and frequently changed. They must be large and secured in position by a binding sheet secured over the abdomen by safety-pins. The balsam of Peru should be added if there is deep excavation and sloughing.—*Am. Med. Bi-Weekly.* C. W. S.

Dr. THOS. KENNARD, of this city, contributed to the *New Orleans Medical and Surgical Journal*, for October 1878, an interesting article on the subject of sunstroke, based mainly on last summer's epidemic in St. Louis, from which we make the following extracts: The heated terms of 1878 began suddenly, on July the 10th, and continued without much abatement for ten days, during which period the total mortality from all diseases was 499, of which number 154, or about 31 per cent., was caused by coup-de-soleil. Of this number 115 were males and 39 females; 147 white and 7 negroes. There were four deaths under 15 years of age; 18 from 15 to 30 years; 65 from 30 to 45 years; 38 from 45 to 60 years; 29 about 60 years.

The deaths occurred as follows: July 10th, 2; 11th, 3; 12th, none; 13th, 13; 14th, 12; 15th, 41; 16th, 22; 17th, 23; 18th, 17; 19th, 15; 20th, 6. The nationalities were: Germany, 62; United States, 36; Ireland, 30; England, 6; others countries, 10.

This gives Germany 40 per cent. of the whole mortality, and about the correct proportion for the number of Germans belonging to our working population.

Many other deaths during this period were also due to the extreme heat, though not from sunstroke. There were 50 from cholera infantum; *17 from apoplexy! 40 from convulsions and 34 from other diseases of the brain and nervous system.*

Two hundred and ninety cases were treated for heat exhaustion at the City Dispensary, among whom were eight colored persons. Five died at the Dispensary and 105 were transferred to the City Hospital, at which institution 112 cases in all were treated and only nine died.

Since that period there has been a gradual increase in the temperature and a number of cases of sunstroke have been reported, as also an increased number from the indirect effect of solar heat. During the week ending August 10th we had 2 deaths from sunstroke, 13 from convulsions and 9 from other diseases of the brain and nervous system. During the week ending on the 17th, there were several cases of heat exhaustion, but no deaths; and the mortality was unusually small (119) or a death rate of only 12.37 to 1000 inhabitants.

Nervous exhaustion from exposure to an excessive degree of heat is the true meaning of sunstroke.

To maintain health, it is absolutely necessary to keep the temperature of the blood as nearly as possible at its normal degree. It cannot rise but very little above one hundred without producing fever and exhaustion, nor can it fall much below that point without causing chilliness and disease. In the severest fevers the over-heated blood will paralyze the nervous system and cause death generally before it reaches 108°, because such a temperature is incompatible with life.

After the con mencement of an epidemic, many deaths occur on cloudy days in the shade, where the temperature does not

range very high. Persons debilitated by age, and worn out from grevious sickness are often overcome by heat, when they have not been exposed to the sun's rays at all, which proves that death is due to nervous exhaustion from the heat and not to insulation.

The belief that a high humidity of the atmosphere is an essential condition for the production of sunstroke, has not been confirmed by experience and extended observations, and although many cases that have occurred indoors where the atmosphere was very moist, but the temperature not excessive, naturally inclined us to that opinion, it has been fully demonstrated that excessive and continued heat without regard to moisture is the one essential cause.

The temperature during this period, taken from Mr. A. S. Aloe's standard thermometer, at his instrument store on the corner of Fourth and Olive streets, accurately indicated the degree of heat on the ground floor:

	8 A. M.	12 M.	3. P. M.	6 P. M.
July 10th,	84°	92°	96°	91°
" 11th,	83°	92°	96°	93°
" 12th,	85°	92°	98°	92°
" 13th,	88°	93°	98°	95°
" 15th,	86°	94°	99°	97°
" 16th,	86°	93°	100°	97°
" 17th,	87°	95°	99°	96°
" 18th,	86°	94°	99°	97°
" 19th,	85°	93°	97°	91°
" 20th,	84°	93°	97°	91°

Dr. Geo. Engelmann, who has made accurate meteorological observations in our city for the past forty-seven years, states in his reports for 1855, that the two great features of the climatic condition of 1854—the heat and dryness—were almost reversed in 1855.

The mean annual temperature had only been lower in 1835, 1838 and 1843. In June it was cooler than he had ever observed it in 23 years. July and August had an average temperature. September showed an unusually warm and steady one. From what we have written, then, it appears that neither an intensely dry heat, nor any marked increase in the humidity and closeness of the atmosphere is requisite for the production of heat-exhaustion. *Only an uninterrupted continuance of high temperature is necessary*, and the reason why we suffer so grievously in St. Louis during a heated term, is that we have at such times no cessation to the heat, no night breezes to cool the atmosphere and induce refreshing sleep. The still and torrid heat banishes sleep, and we tumble and toss about all night, and are more wearied and worn out in the morning than when we retired.

Dnring the last four days of June, and in the first five of July, 1854, fifty-three deaths occurred in St. Louis from sunstroke, when the mean temperature of these nine days was only 86°. During the same year and the same month, another period of nine days occurred when the average temperature was 88°, and yet only seventeen deaths were reported from the effects of heat, and stranger still, on the 5th of July, with the thermometer giving a mean temperature of 79°, five deaths took place. *Disordered innervation is the promiment symptom, which is due to a previous disordered condition of the blood by being over-heated.* There is always great thirst. If these conditions be not rapidly relieved we will have vertigo, an increase of the hallucinations, wildness of speech, incoherency of thought, a species of hysterical mania, and sometimes convulsions, terminating in death.

SOME OF THE THERAPEUTICAL USES OF ALCOHOL.—Dr. G. Timins, in the *Medical Press and Circular*, says, on this subject: To dilate the arterial system is the chief therapeutical use of alcohol, as well as its most important physiological action. By relaxing arterial contraction the circulation is immediately modified. The greater proportion of the blood being in the arteries, the whole venous system is relieved, less blood is sent to the lungs, less force required in the heart, and the circulation for the time made easier. Coldness of surface, lividity of complexion, oppressed respiration, and feeble or laboring action of the heart (collapse) are accompaniments and symptoms of a preponderance of blood in the venous system, and are indications for the use of alcohol. In sudden cases of collapse, if the patient cannot swallow he should be made to inhale ether by the clothing about his nose and mouth being saturated by that substance. Then diluted alcohol may be injected into the bowel.

Local passive congestion, so frequent and dangerous in the course of debilitating diseases and of convalescence, requires local treament, but this will be much aided by, and often unsuccessful without, the cautious administration of alcohol.

In pneumonia, intercurrent or sequent of fever, the exanthems, severe injuries and operations, general blood-letting and antimony are inadmissible, and aconite is dangerous. In such cases alcohol, given to the amount of half an ounce of proof spirit (for an adult) every three or four hours, will be found a useful help to local derivation. Also, after the subsidence of a sharp attack of pneumonia in the healthy, when the diet requires most careful watching, and the return to ordinary food to be made most gradual, the advantage of saline expectorants will be much increased by alternating them with moderate doses of alcohol.

In fever, snake bite, and other states in which the powers of life seem oppressed by blood poisoning, the free use of alcohol, by antagonizing venous congestion, gives time for curative measures to be employed.

On the other hand in all inflammations, except during the stage of collapse, and in pneumonia, which is rather an active venous congestion than an inflammtion, in all inflammations in the active stage, the use of alcohol is contraindicated. Indeed, if there were such a remedy, a drug which acted in the directly contrary way to alcohol, one producing a preponderance of blood in the veins, would be indicated in inflammation.—*Med. Surg. Rep.*

Dr. HAMMOND, a reputed expert on insanity, an extensive writer on the subject, at one time surgeon-general of the United States army, and now associate of the *Journal of Nervous and Mental Diseases*, said recently, in a discussion which took place on this subject at a meeting of the Medico-Legal Society of New York, " that he is in favor of punishing insane people just as he would a tiger who went about destroying people. If a lunatic had a homicidal mania, he would hang him." He would not only hang any and all insane people who killed any one, but he would hang them if they had a mania to kill, even were that deed not performed. This would be an effectual way to make vacancies in our asylums, and would remove perplexing problems from our courts of law to the scaffold and the grave. I am sure such a brutal idea will never prevail where humanity exists. One of the theories of the transmigration of souls was that some one died when each mortal was born, and the soul of the dead one was immediately translated to the new-born child. I am afraid no one died when Dr. Hammond was born. I take this charitable view of the author of such a horrible proposal.—*Dr. Daniel Clark, in Canada Lancet.*

CAMPHOR AS A HYPNOTIC.—Wittich has repeatedly administered camphor to relieve the imsomnia which accompanies certain forms of mania, hysterical insanity, and hypochondria. He has found that under such conditions camphor acts much better than chloral, morphine, or bromide of potassium. He administers it by hypodermic injection. He dissolves it in olive oil, and the dose which he recommends is from one to one and a quarter grains. Small doses are more certain to produce sleep than large doses. The sedative effect, as a rule, appears rapidly, and the sleep produced lasts several hours. The injection is to be repeated when the restlessness reappears.—*Jour. de Med. de Bordeaux.*

A NEW NERVE.—In a communication to the French Academy, Cyon claims that the eighth pair of cerebral nerves contain two nerves of entirely distinct senses—the auditory and the nerve of space (" Raumnerf "). He considers the latter the source of all our ideas of extension, and of the three dimensions of space. —*The Doctor.* C. H. H.

PHYSIOLOGY.

FOOD AND HEALTH.—*Sanitary Journal:* It will astonish most men to find out just how little food, compared with their usual habits, is actually necessary to sustain life at its maximum. Dr. T. L. Nickols, of Malvern, England, has recently been lecturing in London, and giving the results of experiments upon himself, with a view to determining this important question. During the first week he lived on bread and its equivalents (wheat meal, oat meal, rice, etc.), milk, fruit, and vegetables; he ate no flesh meat. His habits of life were regular, his excess being that of overwork. The total weight of ingesta (solid) for the first week was three pounds nine ounces, being a daily average of eight and three-fourths ounces. The second week he ate "food of health," milk and fruit; total weight, four pounds four and a-half ounces, a daily average of nine and three-fourths ounces. He reports that at the end of the second week nothing could be better physiologically than the effect of the diet upon him. His digestion was perfect, and the actions of all the various organs were as good as it was possible to desire. During the third week he discontinued milk as unnecessary, and took of solid food three pounds two ounces, an average of seven and a seventh ounces per day. The fourth week his food, being similar, weighed three pounds six ounces, a daily average of eight ounces. He now added soups, puddings, eggs, etc, and the fifth week his food weighed three pounds twelve and a-half ounces. For the sixth week it weighed three pounds fifteen ounces, or nine ounces per day, He had taken this diet without stimulants, and had experienced constant increase of health and strength and power to work, and his weight had remained at about one hundred and seventy pounds. He concluded his lecture with the following sentiments: "The diet-question is at the root of disease. Pure blood can only be made of pure food in proper quantity. Proper attention to diet would reduce the rate of infant mortality and remove many diseases. If the drink of a nation were pure and free from stimulating qualities, and the food were also pure, the result would be pure health."—*Louisville Med. News.*

THE NUMBER OF BLOOD CORPUSCLES.—Bonchul made a series of examinations of the blood corpuscles in adults and children, in their normal health and under pathological conditions. The following resumé of his work is taken from the *Centralblatt für Chirurgie*, No. 25, 1878: 1. In childhood the number of both red and white blood corpuscles is relatively greater than at any other time. 2. In youth the sex has no influence upon the number of red corpuscles. 3. Later in life, in persons of equal age and conditions of health, the female has the smaller number of red corpuscles. 4. Repeated enumerations in the same individual yield the same results. 5. Blood taken from different portions

of the body does not differ in constitution. 6. The number of red corpuscles bears no relation to the constitution or the condition of health of the individual. From which it follows that a simple counting of the corpuscles is a very incomplete and unsatisfactory examination of blood. The quality of the blood depends, not upon the number of corpuscles but upon their constitution, their dimensions, but above all, quantity of hæmoglobin. 7. The question of numbers is of more importance in the case of the white corpuscles, particularty in the lymphatic constitution. The influence of males is very questionable. The average number of red blood corpuscles in the adults will not exceed 4,000,000 (in each cubic millimetre); that of the white 6,000–7,000; the proportion is therefore about 1:700.—*Cin. Lancet.*

ON SUPERNUMERARY BREASTS.—The following are the conclusions which Dr. Godfrain arrives at, in a carefully worked out thesis upon this subject. (1) Supernumerary breasts are rare. (2) They are of the same structure as the normal breast. (3) They are met with most frequently two in number, less often one, and rarely three. (4) Their most common seat is the axilla, and this site is explained by the frequent existence of axillary prolongations of the gland. (5) Some of the supernumerary breasts have, as points of departure, a pediculization, and a migration of the glandular lobules—analogous to the migratory tumors of the breast. (6) These supernumerary breasts may exist with or without nipples, and in the former case the milk secreted resembles that of the normal breast. (7) The above characters of the supernumerary breasts enable us to distinguish them from tumors; but in some cases, in which consecutive alterations take place, their diagnosis may become very difficult, or even impossible. —*Phil. Med. and Surg. Rep.*

RESEARCHES ON THE ACID OF THE GASTRIC JUICE.—Ch. Richet has examined the gastric juice of the dog fish and other carnivorous fishes. The digestive agent of these animals is not a fluid, but a slimy, coherent material, scarcely miscible with water, which, under the microscope, consists of an amorphous substance, with scattered epithelial cells. When a large quantity of water is added to it, it dissolves, and may be filtered. It contains more free acid than the gastric juce of mammals, the quantity estimated as hydrochloric acid amounting to even 10 or 15 per 1000. The bases contained in the juice are not sufficient to salinate the hydrochloric acid, which agrees with Schmidt's statements in regard to the acid of the gastric juice of the dog. Yet it is not completely free; its state of combination appears to be similar to that obtained when hydrochloric acid is added to glycocol, leucin or albumen.—*Lancet.*

SKULLS.—At the recent meeting of the Anthropological Congress in Paris, Dr. Lebon gave the results of his experimental re-

searches upon the relation of the volume of the cranium to intelligence. Dr. L. has studied many skulls of many races, and is satisfied that the degree of intelligence is proportionate to the capacity of the cranium. The best endowed races have the greatest average cranial volume, and in any race the biggest heads have "the most brains," in a figurative as well as in a literal sense. There are individual exceptions, but the general law is none the less true. Among his measurements of heads, Dr. L. has made more than twelve hundred from living subjects in Paris, and by a series of curves he shows their relative development. He arranges them in five classes, which stand as follows according to size, the biggest being put at the head: (1) literary and scientific men; (2) the Parisian *bourgeoisie*, or middle class; (3) the old nobility; (4) domestic servants; (5) peasants. —*Boston Jour. of Chem.*

THE DETERMINATION OF SEX IN UTERO.—Dr. Upton, of Michigan, in *New York Medical Record*: I am led in this connection to air a theory of the generation of the sexes which, if correct, will throw more light on this mysterious subject of embryology, and will explain the law discovered by M. Thury, Professor in the Academy of Geneva, and referred to in Dr. Mudd's communication. My experience extends over nearly eight years of obstetric practice, and in every case where I can obtain sufficient and accurate data upon which to base my calc lations, I am able to predict the sex previous to delivery. The law is substantially thus, viz: Conception resulting from intercourse *subsequent* to the menstrual flow will result in female offspring; while conception from intercourse in the *latter half* of the menstrual period, or *previous* to the menstrual flow, will result in male offspring. Observations and inquiries carefully made with a view to determine the correctness of this law have established its truth, in my own mind, beyond question.—*Louisville Med. News.*

UREA FORMATION.—Professor Gamgee, of Owen's College, Manchester, has recntly published an account of some new experiments to determine the seat of the urea formation in the body. The result is, the experiments have demonstrated that the liver is the principal if not the only organ of the body concerned in urea formation.—*Ibid.*

THE DIFFERENTIATION OF COMA FROM ALCOHOL.—*London Lancet*: After alluding to Dr. Richardson's statement that in alcoholic coma the temperature falls, and that this is a distinguishing mark from other forms of coma, Dr. Macewen alleges that he has observed the temperature in a series of cases of fracture of the skull, opium-poisoning and apoplexy, and that in all these cases the temperature was found very much below the normal. Consequently this point is not to be relied on for purposes of diagnosis. Dr. M. also controverted the statement that

in alcoholic coma there is dilatation of the pupil. He had found contraction the rule; but he had accidentally discovered that if a patient was shaken or disturbed, the pupil dilated, but very soon contracted again. He therefore lays down the rule that an insensible person who, being left undisturbed for from ten to thirty minutes, has contracted pupils, which dilate on his being shaken, without any return of consciousness, and then contract again, can be laboring under no other state than alcoholic coma. Dr. Macewen's position in the Royal Academy of Glasgow gives his observations upon this subject much authority; but the test must have a larger trial before it is finally accepted.—*Louisville Med. News.* I. N. L.

VENEREAL DISEASES

MECHANISM OF ORCHITIS.—In a recent paper on the mechanism of recurrent orchitis, and inflammatory orchitis generally, M. Despres arrives at the following conclusions: 1. Recurrent orchitis and inflammatory orchitis are both due to the retention of semen in the testicle. 2. The cause of this retention is not always situated at the same point, but it is more than probable that swelling of the mucous membrane of the ejaculatory ducts and vas deferens, or of the lining membrane of these canals at the periphery in the prostate, or of the mucous membrane of the urethra, is the ordinary cause of retention of the semen. 3. The rarity of suppuration in cases of orchitis allows these inflammations to be designated seminal engorgements of the testicle, in the same way that retention of milk in the mammæ has been called lacteal engorgement. 4. The appearance of orchitis on from the tenth to the twentieth day of gonorrhœa, is in accordance with the functional activity of the testes; those patients with an actively exercised organ should develop orchitis towards the end of the urethritis. 5. Orchitis occurring during convalescence from gonorrhœa is not produced by the same mechanism as that following an injury. 6. Orchitis due to a wound, or to some urethral irritation, can be explained by swelling of the affected parts, particularly on a level with the ejaculatory ducts and vesiculæ seminales, which rapidly prevents the flow of semen into its reservoir, the vesiculæ seminales.—*London Medical Record*, Nov. 15, 1878.—*Amer. Jour. of Med. Sciences*, January, 1879.

[This novel explanation gains confirmation from those cases

of simple acute orchitis which are occasionally produced by continued caressing of a virtuous female where sexual gratification is impossible. I have treated several cases of violent orchitis produced in this manner and which rapidly subsided under free purgation, local anodyne applications and nauseating doses of tartar emetic. They originated from no other cause than the one mentioned.]

[IODOFORM.—Iodoform as a local application for chancroids and chancres has for several years past been my favorite treatment, and I can find no objections to it except the smell. I always use it pure, by sprinkling the powder on the ulcers and then applying a small piece of lint. It causes no pain or irritation and keeps the sore clean, and makes it heal rapidly in most cases and has a most decided local anæsthetic influence.]

Dr. Mracek, clinical assistant to Prof. Sigmund, of Vienna, and Prof. Zeissl, of Vienna, briefly reports the use of iodoform in Sigmund's clinic during the early part of 1878. It was applied in one of the following forms: 1. One part iodoform to one of rectified spirits, and five of glycerine. 2. Three or four parts powdered white sugar. 3. Five parts of vaseline; or as collodion, 1:10 or 1:15. A small brush was used to apply the preparations with, and then cotton-wool was laid over the part and fixed with plaster. The dressing was not changed for twelve or twenty-four hours. Syphilitic ulcers, hard chancres, swollen glands and ulcerating gummata were treated with success. The iodoform causes next to no pain; the sores acquire a clean surface in twenty-four or forty-eight hours, in three or four days granulations are rapidly growing, and within a week cicatrization has set in with remarkable vigor. The antiseptic effect of the iodoform checks all smell from grangrenous sores; and lastly iodoform does not permanently stain the clothes. Compared with lotions of carbolic acid, salicylic acid, chloral and astringent preparations in similar cases, iodoform carries off the palm.

Prof. Zeissl especially recommends iodoform as an internal remedy in syphilitic neuralgia, and describes two cases which, resisting all other remedies, yielded only to iodoform. In suppurating glands, with or without sinuses, he is averse to the local application of iodoform for more than a few days; but in torpid ulcers, whether specific or not, he speaks most warmly of its value.—*Med. Times and Gazette*, and *Amer. Jour. of Med. Sciences*, January, 1879. THOS. K.

Editorial.

MEDICAL COMMENCEMENTS.

The annual commencement exercises of the Missouri Medical College and of the St. Louis Medical College and the Missouri Dental College have just been held; the former on the evening of March 5th, the two others, in conjunction, on the evening of March 7th.

The annual meeting of the Alumni Association of the St. Louis Medical College took place on the day of the commencement.

Since the reduction of the fees in the fall of 1878, the Missouri Medical College has greatly increased the size of its winter classes, as well as the number of its graduates. The graduating class this year numbers eighty-two. The St. Louis Medical College established, three years ago, a special graded course of study covering three full years, and this year graduates its first students educated under this regime. Since the adoption of this course the number of students in attendance has slightly diminished. The graduating class this year numbers fifty-seven. This diminution is not an indication that the three-year plan is unpopular, but that the finances of medical students influence them largely in their choice.

SPRING AND SUMMER SESSIONS.

We have received from the Dean of the Missouri Medical College the announcement of its Spring and Summer Course of Lectures and Clinics. This course began on the 2d of March and ends on the 31st of May. The Secretary wishes the students to note that attendance on this course will not be accepted as equivalent to attendance upon one or other of the two regular sessions required for graduation.

We have also received the prospectus of the Spring Session

of the St. Louis Medical College for 1879, beginning March 10th. This course is supplemental to the lectures of the Winter session, aud includes such special subjects as practical chemistry in the laboratory; ophthalmology; diseases of the nervous system; gynæcology; minor and operative surgery; physical diagnosis; diseases of children; special therapeutic methods; clinical examination of the urine; histology and syphilis and diseases of the skin. In addition to lectures and special courses of in struction in these departments, all the regular clinics of the College are kept up and several additional clinics are opened. This course also includes practical instruction in pathological anatomy, by autopsies and demonstrations of fresh specimens at the City Hospital.

THE BANQUET.

The Banquet of the Alumni Association of the St. Louis Medical College was as usual a very enjoyable occasion. About eighty of the Alumni, and other physicians interested in the College, were present, together with a few especially invited guests. This banquet has become a regular annual festival, and with the other exercises of the Alumni Association, does much to keep up the interest of the graduates of the College in each other and in their Alma Mater. From the remarks of the President, Dr. I. N. Love, we cull the facts that the Association was organized twelve years ago, largely through the efforts of Professor J. S. B. Alleyne, and that its first President was the late Professor M. L. Linton. Besides its annual exercises and banquet, the Association offers an annual prize for an essay on some subject connected with medicine, and in various other ways labors to promote the advancement of medical science and the improvement of the Alumni of the College.

IN AN editorial notice last month of the salutatory of a local medical editor, we charged him with undervaluing the efforts which have been made in our own city for the elevation of the

Standard of Medical Education, and we spoke of the St. Louis Medical College as having made "praiseworthy and very successful efforts" in that direction by the establishment of "a course of study covering three years." Complaint has been made to us by the Dean of the Missouri Medical College that we have done it an injustice in that we did not also notice the "optional three term course" referred to in the announcement of that College (received a few days ago) for the year 1878–'79.

The fact is that we knew of the successful execution of such a plan by the St. Louis Medical College, entered upon three years ago and now bearing its first fruits in the graduation of thirteen students who have persued the full course of three years, but we did not then know of any college in the city adopting a similar course.

The scheme of the Missouri Medical College, if we rightly understand it, is in all essential points the same as that which was brought out in 1869 by the St. Louis College of Physicians and Surgeons and was adopted in the announcement of the Missouri Medical College for 1870–71. After the closure of the College of Physicians and Surgeons the Missouri Medical College ceased to call attention to the scheme, and we are not aware that it was revived in any of its later announcements until last year.

Whether this impression be altogether correct or not, the announcements of our Medical Colleges certainly now invite their students to devote more than two years to the study of medicine, and the announcements of the St. Louis Medical College for three years past have given great prominence to the plan of three years study, and have set it forth in a form which seems to leave no opportunity for the student who once enters upon it to change his mind and abandon it for the old plan of graduating at the end of his second year.

These facts are open to all who will take the trouble to read, and it seems clear to us either that our new confrere in medical journalism did not know what is doing in our own city or else that he has feared to give offense by a just discrimination in the award of praise.

THE PLAGUE.

The anxious interest manifested by the public in everything concerning the plague, justifies the publication of the observations of great men concerning this disease. Field Marshal Von Moltke is regarded as one of the most acute and accurate observers known. The following extracts from his pen on "The Russo-Turkish campaign of 1828 and 1829" will be of interest to the profession. He states that the pest made its first appearance on the right shore of the Danube in Tschernawoda, Bayardschik, Kawarna, Babadagh, Kuestendsche, Mangalia, and at last at Varna, in the middle of May, 1829. It is claimed that the distribution of the ammunition of diseased soldiers stored away a long time introduced it at the latter point, because the guards of the store-room took it first. Up to August 26th, 5509 patients had been received at the plague hospital. Of 41 physicians 28 were affected, of whom 20 died. This serious loss became a calamity, because their places had to be supplied by inexperienced young practitioners or foreigners not conversant with the language. The sick and dying lined the roadside, the fences and the brushes. The attack generally came on at, and after sundown. Shivering is succeeded by intense cold, changing into violent fever. with delirium. The patient is communicative and assures that his sickness amounts to nothing. When approached he arises, stumbles backward, or sinks down as if struck by lightning. His memory is bad, he articulates slowly and acts like a drunken man. The only salvation seems to be a very violent perspiration. Internal remedies seem to have no effect. At Varna applications of cold water (shower baths) often cured and always gave relief. In colder weather oiling the body sometimes had good results.

In another of his works "Conditions and Incidents in Turkey," he writes of the pest in Constantinople in 1837. This plague was the most virulent that had existed for a quarter of a century. For entire days he says I have traversed narrow alleys of the city and suburbs, entered the hospitals, surrounded by the inquisitive, have met the dead and dying and am conscious that I did not expose myself to any great danger. The great *arcanum* is cleanliness; the moment I arrived at home, I changed

my under and outer garments from head to foot. The latter garments were hung in the open window during the night. What degree of protection these simple precautions afford, is proven by the small number of victims of the plague among the Franks, while the Turks and Rajahs die by the thousand. Only 8 to 12 Frank families were attacked, and then in most cases they were domestics or children. Among the Dragomen who for centuries have associated with Turks, only one case of plague is known. Where this disease even manifests itself, the most radical disinfection must be resorted to at once.

The Turks view this matter in a different light; the question with them is not, will a person contract the plague, if he touches an affected individual, but rather whether human foresight can prevent earthly evil. Their conviction of the contrary, that this cannot be done is almost admirable. They divide the clothing of the deceased, (that is almost certain to bring their death) cheerfully among each other. Nothing affects their faith, "*Allah Kerim*" (God is merciful) and nothing can escape the "Kismeth." With all this fatalism the Turks are tolerant towards us, certain of their superiority. "Do not approach him, he is afraid," he will say good naturedly and without sarcasm. The *hamals* or carriers carry the sick and dead on their backs. He tries to ignore the plague—never says Dschimudschah but Hastalyk (sickness.)

We quote the following from the carefully prepared reports, which we receive weekly from the Surgeon General, U. S. Marine Hospital, Dr. Woodworth:

"Official reports of European medical officers in China, show conclusively that true "bubonic plague" has prevailed extensively in that Empire during the 30 years preceding 1873, when it was supposed to be wholly extinct. The reports also show that owing to the meager facilities for communication with Central Asia, virulent epidemics may ravage extensive districts of that country, without any knowledge of their existence extending to Europe. The reports present records of the disease having prevailed in the Province of Yunnan, to which it seems to have been introduced from Burmah, during 20 of the 30 years in question, varying in intensity in different parts of the Province, and in different years. The appearance of the disease was coincident with the breaking out of the rebellion against the Imperial government which was longer maintained, and suppressed with more violent measures in Yunnan than in any of the other provinces; conditions which undoubtedly contributed greatly to

its virulence, as did also the superstitious practice of refusing to bury the dead, who are exposed on a bier to the sun till completely decomposed. The plague was very prevalent in Yunnan in 1871-2 3, and in the latter year suddenly re-appeared in Mesopotamia and Persia, gradually extending its area, until in 1877 it reached the shores of the Caspian sea, prevailing especially at the town of Restch, which has a direct trade with Astrakan. In May and November, 1877, a fever of intermittent type, accompanied with glandular swellings prevailed in the port of Astrakan and in Wetlyanka, and other villages of that province, and in November, 1878, a similar affection again appeared at Wetlyanka; few deaths had occurred up to this time, but about Dec. 1st, the disease assumed the malignant character that has marked the present outbreak. The report of the Russian Medical Service of the Interior for 1877, which has just been made public, announces that 241 cases of Siberian plague were reported to the government during the year, the mortality being 21°; the principal outbreaks occurred in the Provinces of Viatka and Tchernigow, which are a considerable distance from each other, and were contemporaneous with, or occurred soon after, the virulent prevalence of the disease in Persia.

"From the above facts, which have been obtained from official sources, and are in the main well attested, it seems proper to conclude that instead of the late outbreak being due to the spontaneous regeneration of the virus of the plague in the valley of the Volga, or at the farthest, in Persia, the disease was re-introduced from China into Persia, and thence to Russia, local conditions in each instance probably favoring its development. Of these conditions no authentic account will be obtained until the International Commission of Experts who are visiting the infected district, make their report. The return of cold weather, combined with the stringent measures adopted by the government, seem to have confined the late violent outbreak to the limited district where it first appeared. The American Ministers to Austria and to Russia, report that the disease has manifested such an extremely virulent and contagious character, that great alarm exists in the whole of Eastern Europe, and urge upon the government the necessity of taking measures to prevent the possibility of the introduction of the disease into the United States. The measures already taken by this government for preventing the importation of goods from the infected districts, except under proper precautions, are for the present considered sufficient for this purpose, especially if the ports of entry are kept free from the unsanitary conditions that favor the spread of epidemic disease."

Book Notices and Reviews.

THE ANTAGONISM OF THERAPEUTIC AGENTS; AND WHAT IT TEACHES. By J. MILNER FOTHERGILL, M. D., Member of the Royal College of Physicians, London, etc. Henry C. Lea, Philadelphia, Publisher. 1879.

This remarkable little book, which is "the essay to which was awarded the Fothergillian gold medal of the Medical Society of London, for 1878," comprises in a brief but lucid form, the most interesting discussion of the few subjects treated of, which has ever been presented to the medical profession. The author, in his well-known, charming style, confines his attention to the action of a few familiar, but, for the most part, imperfectly understood drugs, upon the centers of *circulation and respiration*; explaining how their functions may be stimulated or depressed with almost unerring certainty. The conclusions of Dr. Fothengill are so rationally and forcibly presented as to make a profound impression on all so fortunate as to read them.

We would advise every practitioner to buy this little work as soon as possible, for the fact is he cannot afford to do without it.

W. COLES.

A PRACTICAL TREATISE ON THE MEDICAL AND SURGICAL USES OF ELECTRICITY. Including Local and General Faradization; Localized and Central Galvanization; Electrolysis and Galvano Cautery. By GEO. M. BEARD, A. M., M. D., and A. D. ROCKWELL, A. M., M. D. Second Edition, Revised, Enlarged and mostly Re-written. With nearly 200 Illustrations. [New York: Wm. Wood & Co., Great Jones Street, 1878.]

This is the very best work on Electricity in the English language.

A PRACTICAL MANUAL OF THE DISEASES OF CHILDREN, WITH A FORMULARY. By EDWARD ELLIS, M. D., Late Senior Physician to the Victoria Hospital for Sick Children, etc. Third Edition. 8 vo. pp. 213. [New York: Wm. Wood & Co., 27 Great Jones Street. 1879.]

DIFFERENTIAL DIAGNOSIS: A Manual of the Comparative Semiology of the More Important Diseases. By T. DE HAVILLAND HALL, M. D., Assistant Physician to the Westminster Hospital, London. American Edition with Extensive Additions. [Philadelphia: D. G. Brinton, 115 South Seventh Street. 1879.]

PHYSIOLOGY: Preliminary Course Lectures. By J. T. WHITTAKER, A. M., M. D. Prof. of Physiology and Clinical Medicine in

the Medical College of Ohio, etc. Illustrated. 16 mo. pp. 288. Price, $1.75. [Cincinnati: C. R. Murray. 1879.]

THE PATHOLOGICAL ANATOMY OF THE EAR. By HERMAN SCHWARTZE, M. D. Professor in the University of Halle. With the Author's Revisions and Additions, and with the Original Illustrations. Translated by J. ORNE GREEN, A. M., M. D. [Boston: Houghton, Osgood & Co. 1878. 8 vo. $2.00.]

AN INTRODUCTION TO PATHOLOGY AND MORBID ANATOMY. By T. HENRY GREEN, M. D., F. R. C. P., London; Physician to Charing Cross Hospital. Third American from the Fourth Revised and Enlarged English Edition, With 132 Illustrations. [Philadelphia: Henry C. Lea. 1878.]

NEW AND ORIGINAL THEORIES OF THE GREAT PHYSICAL FORCES. By HENRY RAYMOND RODGERS, M. D. 1878. [From the Author.]

A MANUAL OF PHYSICAL DIAGNOSIS. By FRANCIS DELAFIELD, M. D., and CHAS. F. STILLMAN, M. D. [New York: Wm. Wood & Co.] 1878. Illustrated.

Dr. Delafield has prepared this manual for those who teach as well as those who are learning the art of physical diagnosis. He has made it as concise as possible, and has had it bound interleaved, so that it may be used as a note book as well as a guide. Dr. Stillman prepared the drawings. They are really beatiful and accurate. He has used the superimposed plan for the plates, which, as he says, is an old plan, yet it is of much practical value. We cheerfully recommend the work.

CONSPECTUS OF ORGANIC MATERIA MEDICA AND PHARMACAL POLARY. Comprising the Vegetable and Animal Drugs; their Character, Geographical Origin, Constituents, Doses, Adulterations, etc. Table of tents, and solubilities of alkaloids appended. By L. E. Sayre, Ph. G. pp. 220. [Philadelphia: D. G. Brinton, 115 South Seventh street. 1879.]

ELEMENTS OF COMPARATIVE ANATOMY. By CARL GEGENBAUR, Professor of Anatomy and Director of the Anatomical Institute at Heidelberg. Translated F. JEFFREY BELL, B. A., Magdalen College, Oxford. The translation is revised and a preface written by E. RAY LANKESTER, M. A., F. R. S., Fellow of Exeter College, Oxford, and Professor of Zoology and Comparative Anatomy in University College, London. pp., 645. 8vo. [London: Macmillan & Co.] 1878.

The Female Generative Organs in their Medico-Legal Relations. By J. W. UNDERHILL, M. D., Lecturer on Medical Jurisprudence in the Cincinnati College of Medicine and Surgery.

[Reprinted from the American Journal of Obstetrics and Diseases of Women and Children, Vol. 12., No. 1, January, 1879.]

Diphtheria and its Treatment. Epidemic of 1875-76, Meriden, Conn. By CHAS. H. S. DAVIS, M. D. [Reprinted from the Richmond and Louisville Medical Journal.]

Upon the Treatment of Strumous Disease, by what may be called the Solfatara Method. By HORATIO R. STORER, M. D., Newport R. I., President of the Gnyæcological Society of Boston. [Reprinted from The Boston Medical and Surgical Journal, June 27, 1878.]

Variola: its Causes, Nature, and Prophylaxis, and the Dangers of Vaccination. By C. SPINZIG, M. D. (Literary revision by WM. T. HARRIS, Superintendent of the Public Schools of St. Louis.) Sold by St. Louis Book & News Co., 307 N. Fourth street.

The Development of the Nervous Tissues of the Human Embryo. By DR. H. D. SCHMIDT, Member of the American Neurological Association. [Reprinted from the Journal of Nervous and Mental Disease, July, 1877.]

Optic Neuritis, with Notes of Three Cases. By C. J. LUNDY, M. D. [Reprint from Detroit Lancet, December, 1878.]

A Review of the Neuroses of the Pneumogastric and Sympathetic Nerves, with some Account of the Anatomy, Physiology, and Pathology of these Nerves; also of the Vaso-Centers and Sweat Centers. The Exhibition of Electricity, Atropin, Muscarin and Pilocarpin; with cases to Illustrate, etc. By JOHN J. CALDWELL, M. D., Baltimore, Md. [Reprint from the Va. Med. Mo.]

Aphasia, or Aphasic Insanity, Which? A Medico-Legal Inquiry. By DR. C. H. HUGHES, St. Louis, Mo. [From the American Journal of Insanity, for January, 1879.

The Local Treatment of Eczema. By HENRY G. PIFFARD, M. D., Professor of Dermatology, University of the City of New York; Surgeon to Charity Hospital, etc. [Reprinted from the Medical Record, October 26th, 1878.]

Treatment of Fracture of the Shaft of the Femur, the "American Method." A Paper read before the Minnesota State Medical Society, at St. Peter, June 18, 1878. By FRANKLIN STAPLES, M. D., of Winona. [Reprinted from the transactions of the Society.]

A New Treatment for Spine Diseases. By MEIGS CASE, M. D., Oneonta, N. Y. [Reprint from the Cincinnati Lancet and Observer, May, 1878.]

Case of Repeated Attacks of Apoplexy with Aphasia. By DR. H. D. SCHMIDT, Pathologist of the Charity Hospital of New Orleans, and Member of the American Neurological Association. (With Plate.) [Reprinted from the Journal of Nervous and Mental Disease, July, 1878.]

Placenta Prævia. By G. M. B. MAUGHS, M. D., Professor of Obstetrics and Diseases of Women, Missouri Medical College. [Read before the St. Louis Obstetrical and Gynæcological Society, Sept. 19, 1878.]

Total Abstinence. A Course of Addresses. By BENJAMIN WARD RICHARDSON, M. D., F. R. S., M. A., LL. D., F. S. A. Fellow of the Royal College of Physicians and Honorary Physician to the Royal Literary Fund.

Case of Poisoning by Oil of Chenopodium. By THOMAS R. BROWN, M. D., Professor of Clinical and Operative Surgery, and Diseases of the Genito-Urinary Organs, College of Physicians and Surgeons, Baltimore, Md. [Reprint from the Maryland Medical Journal for November, 1878.]

A History of the Diagnosis, Pathology and Treatment of Yellow Fever. By J. B. MARVIN, M. D., etc. [Reprinted from the Amerrican Practitioner, November, 1878.]

On Gastro-Elytrotomy. By HENRY J. GARRIGUES, M. D., Fellow of the American Gynæcological Society, Fellow of the New York Obstetrical Society, etc. With three woodcuts. [Reprinted from the New York Medical Journal, October and November, 1878.]

Address of W. O'DANIEL, M. D., President of the Medical Association of Georgia, delivered at the Twenty-Ninth Annual Meeting. [Reprint from the Transactions of the Medical Association of Georgia, 1878.]

An Essay on Menstruation and Ovulation. By O. S. SANDERS, M. D., Boston.

Report of Investigations into the Pathogeny of Diphtheria. Conducted by EDWARD CURTIS, M. D., AND THOMAS E. SATTERTHWAITE, M. D.

On Artificial Disinfection as a means of Preventing the Spread of Infectious Diseases. By REV. J. H. TIMINS, M. A., F. G. S., Vicar of West Malling, Kent Student of St Thomas' Hospital, London.

A Series of American Clinical Lectures, Edited by E. C. SEGUIN, M. D. Volume III. No. XI. [Whole No. 36.] Two Lectures on Lister's Antiseptic Method of Treating Surgical Injuries. By JAS. L. LITTLE, M. D., N. Y. The Same; The Diagnosis of Progressive Locomotor Ataxia. By E. C. SEGUIN, M. D., N. Y. [New York: G. P. Putnam's Sons.]

METEOROLOGICAL OBSERVATIONS.

By A. WISLIZENUS, M. D.

The following observations of daily temperature in St. Louis are made with a MAXIMUM and MINIMUM thermometer (of Green, N. Y.). The daily minimum occurs generally in the night, the maximum at p. m. The monthly mean of the daily minima and maxima added and divided by 2, gives quite a reliable mean of the monthly temperature.

THERMOMETER, FAHRENHEIT—JANUARY, 1879.

Day of Month	Minimum.	Maximum.	Day of Month.	Minimum.	Maximum.
1	28.0	30.5	18	17.0	35.0
2	— 6.0	7.5	19	3.0	18.5
3	10.5	2.0	20	14.0	42.0
4	— 9.0	7.0	21	27.0	55.0
5	— 2.0	10.0	22	38.0	54.5
6	— 3.0	17.0	23	28.5	34.0
7	12.0	28.0	24	28.5	52.0
8	15.0	21.0	25	38.0	53.0
9	0.0	16.0	26	34.0	54.0
10	1.0	25.0	27	48.0	58.0
11	20.0	32.0	28	39.0	42.5
12	11.5	32.0	29	36.5	43 0
13	17.5	35.0	30	32.0	42.0
14	24.0	29.0	31	34.0	43.0
15	25.5	39 0			
16	25.0	29.5	Means	19.0	33.0
17	21.0	37.5	Monthly Mean	26.0	

Quantity of rain 1.75 inches.

ERRATUM: The minimum in Decemcer, 1878, was 1.0 deg. on the 24th

MORTALITY REPORT.---CITY OF ST. LOUIS.

FROM DEC. 29, 1878, TO JAN. 25, 1879, INCLUSIVE.

Septicæmia..... 6	Cholera Infantum.	Hydrocephalus and	Apoplexy 8
Measles 2	Inanition, Want of	Tubercular Men-	Cyanosis and At-
Syphilis, Cong'al.. 1	Breast Milk, etc.40	ingitis 3	electasis 3
Scarlatina..... 2	Alcoholism..... 3	Meningitis and En-	Premature and Pre-
Pyæmia 1	Rheumatism and	cephalitis..... 8	ternatural Birth..11
Erysipelas..... 8	Gout.....	All Diseases of the	Surgical Operat'ns. 1
Diphtheria 20	Cancer 11	Brain and Ner-	Deaths by Suicide.. 1
MembranousCroup13	Phthisis Pulmon..57	vous System.....33	Deaths by Accid'nt.14
Whooping Cough.. 3	Bronchitis.....17	Cirrhosis of Liver	
Typhus Fever.....	Pleuritis	and Hepatitis ..13	Total Deaths from
Typhoid Fever.... 8	Pneumonia 66	Enteritis, Gastro-	all Causes.....498
Cerebro Spinal Fe.	Heart Diseases....21	Enteritis, Peri-	Total Zymotic Dis-
Remittent, Inter-	Other Diseases of	tonitis, and Gas-	eases.....133
mittent, Typho-	Respirt'y Organs30	tritis.....19	Total Constitution-
Malarial, Con-	Entero-Colitis.....27	Bright's Disease	al Diseases..... 73
gestive and Sim-	Marasmus — Tabes	and Nephritis ... 4	Total Local Dis-
ple Continued	Mesenterica and	Other Diseases of	eases.....242
Fevers..... 7	Scrofula 22	Urinary Organs. 2	Total Develop'tal
Puerperal Disea's11	Convulsions 23	Chronic lead pois-	Diseases..... 15
Diarrhœal " 8	Aneurism	oning.....	Deaths by Viol'ce. 16

CHAS. W. FRANCIS, *Health Commissioner.*

DEATHS AND RATE OF MORTALITY

Per 1000 Inhabitants, Annually, in the Largest American and Foreign Cities, According to the Latest Returns.

CITIES.	Population.	Date of Return.	Deaths from all Causes.	Annual Death Rate per 1000	Deaths.	
					Infants under 1 Year of Age.	Persons Aged 60 Y'rs and upwards.
New York	1,086,000	3 weeks ending Jan 18	1,778	28.49	.....	.....
Philadelphia	877,500	5 " " Feb 1	1,748	21.42	.....	.....
Brooklyn	549,500	5 " " " 1	1,191	23.52	.....	.....
St. Louis	503,000	4 " " Jan 25	498	12.87	.....	.....
Chicago	460,000	Month of January	664	16.98	.....	.....
Baltimore	355,000	5 weeks ending Feb 1	778	21.61	.....	.....
Boston	353,000	5 " " " 1	793	22.77	.....	.....
San Francisco, Cal.	300,000	Month of December	438	17.19	.....	.....
Cincinnati	280,000	5 weeks ending Feb 1	549	20.44	.....	.....
New Orleans	210,000	4 weeks ending Jan 26	653	27.01	.....	.....
Buffalo	170,000	.....	....	....	.....	.....
Cleveland	162,000	4 weeks ending Jan 25	156	12 54	.....	.....
Washington, D. C.	160,000	Month of December	321	23.61	.....	.....
Pittsburgh	145,000	" " January	244	19.77	.....	.....
Newark	126,000	.....	....	....	.....	.....
Detroit	125,000	.....	....	....	.....	.....
Milwaukee, Wis	123,600	Months Nov. and Dec.	277	13.40	.....	.....
Richmond Va	79,000	Month of January	152	23.08	.....	.....
New Haven, Conn	60,000	.....	....	....	.....	.....
Charleston	57,000	5 weeks ending Feb 1	129	23.50	.....	.....
Memphis, Tenn	50,000	.....	....	....	.....	.....
Mobile	40,000	.....	....	....	.....	.....
Denver		.....	....	....	.....	.....
Galveston		.....	....	....	.....	.....
Indianapolis		.....	....	....	.....	.....
Springfield, Mass.	31,500	.....	....	....	.....	.....
Nashville, Tenn	27,000	Month of January	71	31.38	.....	.....
Sacramento	25,000	.....	....	....	.....	.....
St. Paul, Minn	20,000	.....	....	....	.....	.....
London	3,577,304	January 12 to 18	1,947	28.10	.....	.....
Paris	1,988,806	" 11 to 17	1,039	27.20	.....	.....
Berlin	1,019,620	December 22 to 28	525	26.10	.....	.....
Vienna	727 271	January 5 to 11	375	26.20	.....	.....
St. Petersburgh	869,741	.....	....	....	.....	.....
Bombay	644,405	December 1 to 17	481	30.60	.....	.....
Glasgow	566,940	January 12 to 18	300	27.00	.....	.....
Liverpool	532,681	" 12 to 18	376	36.40	.....	.....
Naples	475,407	December 3 to 9	282	32.00	.....	.....
Calcutta	429,535	" 8 to 14	457	55.50	.....	.....
Hamburg (state)	406,104	.....	....	....	.....	.....
Birmingham	383,117	January 12 to 18	216	29.00	.....	.....
Brussels	175,785	" 12 to 18	179	24 60	.....	.....
Manchester	360,514	" 12 to 18	242	34.90	.....	.....
Dublin	314,666	" 12 to 18	291	48.30	.....	.....
Leeds	304,948	" 12 to 18	145	24.30	.....	.....
Amsterdam	302,268	" 5 to 11	145	24.90	.....	.....
Sheffield	289,587	January 12 to 18	144	25.30	.....	.....
Rome	282,214	.....	....	....	.....	.....
Turin	227,846	December 22 to 28	131	28.30	.....	.....
Alexandria	212,034	Dec. 29 to Jan. 4	161	39.50	.....	.....
Breslau	167,000	Janury 5 to 11	170	32.70	.....	.....
Edinburgh	122,371	" 12 to 18	100	23.00	.....	.....
Dresden	207,845	" 5 to 11	92	22.50	.....	.....
Bradford	185,088	" 12 to 18	81	22.10	.....	.....
Salford	170,251	" 12 to 18	115	33.70	.....	.....
Nottingham	165,267	.....	....	....	.....	.....
Hull	143,139	January 12 to 18	57	20.30	.....	.....
Dundee	142,957	.....	....	....	.....	.....
Portsmouth	129,461	.....	....	....	.....	.....
Leicester	121,473	.....	....	....	.....	.....
Oldham	167,366	.....	....	....	.....	.....
Brighton	103,923	.....	....	....	.....	.....

Compliments of
Thos. Kumar

THE

SAINT LOUIS

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Journal.

VOL. XXXVI——APRIL, 1879——No. 4.

Original Didactic and Clinical Lectures.

ARTICLE XVIII.

EMOTIONAL INSANITY. By J. K. BAUDUY, M. D., Professor of Nervous and Mental Diseases in the Missouri Medical College, and Physician to St. Vincent's Institution for the Insane.

GENTLEMEN:—Insanity is necessarily a disease that must interest you all, because it is a physical affliction which sooner or later may invade the sacred precincts of your own homes. It is a disease which, in the present condition of society, is becoming extremely rife, keeping pace, some authors claim, *pari passu* with advancing civilization.

A certain fascination clings to the study of mental pathology. Present clinical observations teach us that the wear and tear, the stress, the contentions, troubles, competitions and annoyances of every day life, engulf many minds, so constituted in consequence of inherent weaknesses, as not to be able to resist such inevitable influences. In other words, as men must bear the strain and friction of every day life, insanity correspondingly increases.

In the present moment of pathological enlightenment, the fact that insanity is unquestionably a disease of the brain should

admit of no dispute. The interest of its study will be enhanced by our natural efforts to unravel its multitudinous phenomena; and in seeking for explanations of its Protean manifestations, we are oftentimes compelled to dip deeply into the labyrinths and mysteries of brain action. Of the latter, it is true, we have much to learn; nevertheless, the researches of modern science have not been entirely fruitless, but on the contrary have been productive of the most excellent, if not, perhaps, remarkable results.

We can at least, in consequence of this progress in the right direction, dismiss the old mythical theories of the methaphysicians, the representatives of obsolete views never again to be rejuvenated, which taught people to believe that in dealing with the phenomena of insanity, they were witnessing or combatting nonentities, shadows, spiritual processes, mystical conditions of still obscurer origin, as opposed to the purely physical symptoms, the outcroppings or manifestations of brain lesions, rendered more or less demonstrable in all cases, when subjected to the crucible of modern investigation.

Formerly insanity involved social ostracism, and the prejudices which its supposed stigma originated, exist with marvelous pertinacity even in the present day, notwithstanding the teachings of science to the contrary. It was considered necessary that the victim of this disease should forever be sequestered from society, and his misfortune involve in equal disgrace his family.

Now that we know insanity to be simply a physical affliction, instead of a *morbus sacer*, and the result of certain well-recognized pathological deviations; that it not infrequently originates in congestions and inflammatory conditions of the brain; and that just as pneumonia is an inflammation of the lungs, pleuritis an inflammation of the pleura, and nephritis an inflammation of the kidneys, so is insanity a departure from the physiological status of the brain, necessary for the proper evolution of healthy mental and emotional phenomena, having its starting point in the same vascular and irritative disturbances which give rise to other pathological states.

Van du Kolk divided insanity into idiopathic and sympathetic insanity. The former primarily originates in the brain proper, the latter is but the reflex radiation of remote disturbances, starting frequently in other parts of the human organism, and propagated in constant irritative waves towards the central organ of the nervous system. Diseases of the viscera, whether sit-

uated in the pelvic, thoracic or abdominal cavities, are common causes of insanity. The latter malady, in such instances, is superinduced by the disturbances which these organs produce, reflecting them back upon the brain, exciting congestions and inflammatory conditions, which sooner or later lead to the aforesaid development.

Such a result is not astonishing, when the wonderful sympathies of the brain, with every immediate and remote portion of the human economy, is taken into consideration. The intimate relations of the brain with every other organ, blending various interests in one harmonious whole for the common weal of every integral portion of the body, is an indisputable fact.

This is still less difficult to appreciate, when it is recollected that the brain is the supreme center, presiding over all other parts of the nervous system, and the animal economy. Indeed we can hardly conceive of any constituent atom of the body, no matter where found, which is not in more or less intimate relation with the brain. It presides over multitudinous atoms, its influence is felt throughout the entire body, and there is not a muscle, nerve, artery or vein, not even the smallest, most insignificant and unimportant histological element in the human system, but is permeated directly or indirectly by the peculiar nervous force or influence emanating from the "supreme cerebral ganglia." Hence, may it be well said, as stated by a certain writer, that when a man becomes insane, he is insane to the very tips of his fingers.

The brain may truly be said to be the seat of the regulative force of all the phenomena of the mind, of the emotions, intellectual acts, and volitional manifestations.

The term insanity is comprehensive in character. When we speak of insanity in general, we do not allude to one particular form of the disease, but we include in the term a multitudinous variety of morbid brain manifestations; just as the word tumor has frequently the most varied significance, suggestive as it is of many physical varieties and characteristics, numerous classifications, terminations and pathological origins. So the word insanity is to the psychological physician, a mine so rich and varied in its productions, so deep, intricate and labyrinthic, as to be quite inexplorable to the limit we desire. You can therefore form some adequate idea of the comprehensiveness of this term insanity.

Before studying emotional insanity in particular, we will now consider some points connected with the general subject of insanity.

Is there anything in the aspect or appearance of the insane, which will enable us invariably to recognize the existence of the disease by a casual observation of the physiognomy? A fallacy of very common occurrence exists in this connection.

During medico-legal contests, we often hear allusions by the contesting lawyers to the "wild eye of the insane," as a proof of incontestable alienation. This method of recognition of the disease rests upon a very unscientific basis.

All physicians who are familiar with the phenomena of insanity, and are accustomed to explore "the mind diseased," in judging of the presence or absence of the former, know full well the difficulty and fallibility of conclusions based upon such premises.

A careful study and analysis of the physical conditions, or symptomatic manifestations of insanity, clearly indicate how little can be determined by attention to the countenance alone. Let any person who doubts this assertion visit the wards of a lunatic asylum, and after the purely demented patient has been withdrawn (whose features unmistakably and too plainly indicate the departure of all reason and expression), let him examine the vast preponderance of patients who remain, engaged as they will be found, in billiards, chess, the perusal of periodicals and the enjoyment of cards, and let him then, even while giving an attentive ear to their conversations, and whilst studying their features, determine from these facts alone whether or not reason be dethroned. His task would be one of herculean magnitude. It must not be imagined that insanity is an affection the existence of which we hastily conclude to be present, without the most careful scientific analysis and scrutiny.

It is not to be supposed for one moment that medical experts experience convictions as to the presene or absence of mental aberration without most carefully subjecting the data which mould their opinions to the same laws of diagnosis as are applicable to all other diseases. Without such a procedure their investigation would be a farce unworthy of scientific men.

With a careful adherence to such methods of observation, based upon broad principles of medical science, the deductions from certain premises will be susceptible of proof and remain

established upon a firm and immovable basis. Just as in the diagnosis of pneumonia, auscultation and percussion, constituting the physical examination, are conjoined by the prudent physician with a due consideration of the rational symptoms, so in the diagnosis of insanity, all the facts, with an attentive study of all collateral phenomena, must be collectively weighed. What then are the logical deductions upon which to predicate an opinion of insanty?

1. *Hereditary predisposition* is one of the many important links of the pathological chain of sequences which has to be developed in the diagnosis, and is one to which the physician first directs his attention. Ancestral taint, the fact that the parentage of the particular person undergoing investigation is tinctured with previously existing insanity, or allied neurotic affections, must never be lost sight of for a moment. Persons having such an unfortunate inheritance are the victims of an unstable constitution of nervous equilibrium which the most trivial circumstance may overtopple; the victims "of the worst of all tyrannies, the tyranny of a bad organization." That it is inherent in most instances there can be no doubt.

In insanity, as in other maladies, a great many facts are manifest which we would not be able to interpret but for the assumption of predisposition or hereditary transmission.

In many conditions of life numerous people become insane, while others subjected to exactly the same influences will experience no deviation from their normal mental health. This tendency to insanity is therefore but too frequently an heirloom.

2. *Causation* is the next step for consideration in diagnosis. *Predisposing causes*, including sex, period of life, condition of life, individual predisposition, education and many other conditions must be studied.

Exciting causes, subdivided into *physical* and *moral*, next demand attention. Relegated to the former are such influences as intemperance, masturbation, epilepsy, chronic diseases which deteriorate the blood, which latter conditions are prolific of insanity, based upon Cicero's well-known maxim, *mens sana in corpore sano.* Then again, injuries of the head, lactation, pregnancy, uterine diseases or disturbances, puberty, the climacteric period all are of the utmost significance in an etiological sense.

Of the moral causes Maudsley claims that "it is not in the way of great intellectual exercise when unaccompanied by

emotion, to lead to mental derangement; it is when the feelings are deeply engaged, when the mind is the theater of great passion, that it is most moved and its stability most endangered."

Anxiety, jealousy, sorrow, disappointed affection or ambition, are powerful factors in this regard. Causation, therefore, plays a most important part in our diagnosis of insanity.

But it is more especially a *concurrence* of causes that leads to a development of the disease. If we knew all the causes leading to insanity, or could foresee contingencies which may arise, then we might venture to predict insanity in certain individuals or families at particular periods of their lives.

However, insanity does not depend upon one, or a few, but upon a *multiplicity of causes*; and, as Maudsley remarks, "hereditary, predisposing, moral and physical causes are not alone necessary, but a combination, a concurrence of conditions, and then lunacy follows."

In a word, before dismissing the study of causation, various potentialities, the existence of disease, acute or chronic, which leads through physical developments to the production of insanity; particular conditions of organism; all varieties of physical deteriorations; impaired or impeded nutrition; poisoned conditions of the blood; excessive functional activities, however produced; the absence of sleep; reflex actions or sympathies; quantitative as well as qualitative disturbances of the circulation, are all powerful factors in the production of mental disease requiring the psychological physician's closest scrutiny.

The development of psychic functions and their conformity to a physiological type, require a healthy brain for their proper evolution. Diseased brains lead to culminations of morbid, mental and emotional manifestations and phenomenal deteriorations known as insanity.

Brains intellectually overworked, emotionally overexcited, like poor jaded horses tasked too heavily, suffer their functional activities to be overwhelmed, and without sufficient vital recuperative powers total ruin and wreck inevitably follow.

That moral causes, especially the depressing passions, should prove energetic agents in the production of mental disease, need not excite our astonishment. Moral shock not infrequently overwhelms the entire emotional and physical nature of the individual. That powerful emotions are productive of disease, nay, even death, all are aware. Medical literature is stored with facts which prove

conclusively, that the hair sometimes turns gray in a single night. Maudsley (Body and Mind) observes "that a sudden and great mental shock may, like a great physical shock, and perhaps in the same way, paralyze for a time all the bodily and mental functions, or cause *instant death.*"

3. *Change of character, without any adequate external cause,* is the next link of importance in the diagnostic chain we are forging, without which all our efforts to establish the existence of insanity in a given case would be invalidated. Its importance is pre-eminent. It is the pivot on which the diagnosis turns. This change consists in a departure from one's normal self, not merely supposititiously nor hypothetically, but a change established, as all other facts proven or subjected to, the rigid scrutiny of scientific analysis.

Daily actions, sentiments, natural impulses, propensities, passions, moral dispositions, feelings, affections, inclinations, habits are compared with *a normal standard,* a departure from which must be evident to those whose previous acquaintance and intimate relations with the subject of inquiry, peculiarly adapt them for reaching proper conclusions and indisputable decisions in this connection.

Reliance must inevitably be placed under these circumstances by the physician upon the experience, observations and inferences of near relatives, who are better qualified to judge of early abnormities or deviations of the affective life, than the most skillful diagnosticians imaginable.

A mother, for example, could incontestably better establish a change of character in her child, than any other person conceivable. The physician must, however, satisfy himself as to the absence of all possible motives of human action, and all other external adequate causes, which in the absence of *disease,* would sufficiently explain these singularities of conduct, eccentricities of action, and changes in one's natural self, or a departure from that type previously characteristic of the individual.

This departure consists in a multitudinous variety of alterations which it is the duty of the physician to develop. This must so change the person under investigation, that he ceases, as it were, to be the same individual that he was. I am making no reference to discoverable intellectual perversions. I am simply considering deviations in the affective life, presented only in an analysis of actions, as expressive of morbid feelings,

not of words, as illustrative of disordered ideas. The social, domestic, religious and business habits and antecedents must be scrutinized with the utmost rigidity and fullness of detail. Heretofore, an affectionate husband and tender father, the caresses lavished upon his family cease; he repels the advances of his little flock which before constituted his delight; there is a sad revolution in his home life, and the dear ones of his fireside are the first to recognize the stern reality which confronts them. This recognition of the patient's abnormal condition occurs long prior to any overt act of insanity or explosive violence.

The bursting of the storm is long predicted, however, by the keen perception of those whose intimate relations with the patient have caused them to realize its direful foreshadowings. So in all other conditions of life, whether social or domestic, these changes will be perceptible.

Men of strong religious natures and convictions, suddenly become rash, intemperate, obscene, desperate and utterly depraved. These transitions develop themselves without the most intimate friends being enabled to assign the why or wherefore.

An eminent and learned divine, distinguished for his social virtues, his high religious aspirations, disinterestedness, the center of attraction and adulation of his flock, admired, loved and respected by all, pre-eminent for his sanctity and christian perfections, *suddenly, without external adequate cause*, becomes irreligious, intemperate, profligate, and wretchedly dissipated. Suppose, moreover, without notice, he indulges homicidal or suicidal propensities of *recent* development, would we not judge him either a confirmed lunatic, or previously a consummate hypocrite? for the study of his life would inevitably confirm one or the other hypothesis.

Or suppose a parsimonious man, taking care of every dime, possessing a ceaseless and sleepless solicitude for his worldly goods, never giving or expending anything, except for the absolute necessities of life, were suddenly, without adequate motive, to become excessively liberal, squandering his money as recklessly as formerly he had carefully hoarded it, would not such *conduct* point to a most suspicious perversion of feeling, and to a change of sentiment consistent only with insanity? Hence, the significance of actions, when contrasted with the previous conditions or antecedents of a patient.

The foregoing illustrations point especially, therefore, to the development of insanity of the affective type, without any particular concomitant evidences of the existence of morbid intellection.

In *business* relations, if heretofore one has been honest, upright, reliable, a representative man in his sphere of life, whether commercial or professional, a change so perceptible will manifest itself, as to cause his acquaintances to be staggered at its completeness and suddenness. The perturbation of his moral nature will be evident to his most casual acquaintances.

But gentlemen, think you this is all to be considered in this connection?

When you essay to diagnosticate insanity, you must not only dip deeply into the labyrinths of the questions I have already presented for your study, but you must carefully investigate all proven morbid tendencies with equal thoroughness. Suicidal and homicidal propensities are particularly to be examined. When such tendencies—motivelessly existing—are proven, they constitute strong corroborative proof for the presumption of the existence of insanity.

Such links being necessary to establish the existence of emotional insanity, we can but regret and deprecate opinions that once influenced a jury in a celebrated trial in New York State, to bring in the absurd verdict that a man was sane one moment prior to the commission of the homicide, insane during the homicide, and sane immediately subsequent to the act.

Such opinions bring science into disrepute, and constitute a prostitution of the plea of insanity, thus exciting the clamor of popular prejudice, when in the great cause of humanity mental alienation is sought to be proved in genuine cases.

4. *Want of harmony of the individual with his surroundings.* "It is important, therefore, that we have in remembrance the individual's social relations when dealing with moral insanity, as we regard the very different relations of an epithelial cell and a nerve cell when dealing with structures so far apart in the scale of life. It is chiefly in the degeneration of the social sentiments, that the symptoms of moral insanity declare themselves; it is plain that the most typical forms of the disease, can only be met with in those who have had some social cultivation."

This is a matter of the utmost importance to establish, for while we have seen that the change of character just studied,

and that "the morbid phenomena of the diseased mind—witness in some measure to the degree of its previous development, yet the degeneration which disease implies—must needs display itself in an alteration in the kind of manifestation of *feeling*, *thinking* and *acting*—in other words, in a changed self. While again the import, as morbid, of the phenomena displayed, can only be rightly weighed in relation to the individual sphere of life. It is, for example, quite possible, though apt to be forgotten in practice, *that sentiments and acts which are habitual in the lowest station of life may be sure signs of mental disease when uttered and done by one in a high social sphere.*"

There is under such circumstances a want of congruity existing in the social relations, a want of adaptation in the general and particular social harmony of the individual. "A cancer is physiologically illogical; nevertheless it persists, and finally kills the patient, being pathologically logical."

The individual who no longer constitutes a part of the general harmonious whole, for reasons "psychologically accountable," is no longer a unit in the social system as prior to the inroads of emotional perversion. "Insanity destroys the relations and responsibilities of the individual in the social system, making him very much like what a morbid element is in the organic system—something which can not take its due place in the general harmony, and which must either be eliminated from it or sequestrated and rendered harmless in it."

5. According to Maudsley, whose views we are developing, *the standard* by which to measure the perversion is, first, that of the *kind*, that which is fixed by the general consent of mankind; and secondly, that of the *individual*, that which is estimated by the degree of his previous mental development.

Therefore the individual frequently may perform acts which, when compared with his normal standard of action are not in any respect whatsoever characteristic of insanity, or the reverse may be the case. There exists, therefore, a standard which the common sense of mankind has established, by means of which all insane perversions are to be compared, measured and regulated.

By way of illustration let us glance at certain delusions and the significance thereto attached by such a standard. Suppose a patient tell us that a person came into his room through a keyhole, although he had long been familiar with the death of such

person, would a sane mind experience any difficuly in measuring such a vagary?

Take other delusions observed during the practical observations of the insane—where they imagine, for instance, that they are made of glass, or as in one case which I recall of a certain lady who believed that she was an hour-glass, and would request after the sand had run down during a certain time, "to be turned upside down, in order to allow it to run the other way." In such instances the evidences are so incontrovertible as hardly to need the application of the rule I have just enunciated.

6. *Corroborative proofs* of insanity often exist in cases under consideration. Assaults made upon beloved relatives and intimate friends; unaccountable and baseless aversions, especially when accompanied by violent assaults of a homicidal character, which have been perhaps preceded by suicidal propensities, are characteristic of the existence of insanity. Meditative moods, aimless schemes, deep reveries, fits of unusual abstraction, peculiarities and eccentricities of dress, want of tenacity of purpose in persons previously firm, indecent exposures, desires to remain nude, self mutilation, talking to self, squandering property, obscenity, filthy practices, destructive and intemperate habits, are all charteristic of insane people.

7. *The physical symptoms* of insanity should be diligently sought after in all equivocal cases of emotional insanity, viz: headache, insomnia, restlessness, constipation *et id omne genus*. In the concatenation of circumstances constituting the pathological links of the chain of the evidence of insanity, the careful, prudent physician will make patient and thorough inquiries in all these directions enumerated, before announcing his opinion from the witness stand. If all heretofore stated be true, the diagnosis of *emotional* insanity is one of a very complicated character, and the physician who makes it should divest himself of all partiality and should most carefully subject the analysis of his case to the closest scrutiny of scientific investigation. In other words, like any other diagnosis in the field of medical inquiry, it should rest solely upon the merits of the naked facts.

DIVISION OF INSANITY INTO TWO PRINCIPAL GROUPS—a. *Affective or emotional insanity.* b. *Ideational or intellectual insanity.* I shall not attempt in this lecture to enter into various and numerous classifications of insanity. Maudsley's division into two

principal groups, the ideational and emotional, is the greatest advance which has ever been made in this direction, and recommends itself for its intelligibility and simplicity. With the ideational or intellectual variety we have nothing to do in this lecture.

Cases presenting delusions, hallucinations, illusions, dementia, and other perversions of the intellect must necessarily admit of easy interpretation. On the other hand, disturbances of the emotional or affective life may give rise to the greatest discrepancy of opinions, and I am sorry to say, even conflicting and contradictory statements upon the part of medical men. It should be understood that affective, pathetic and emotional insanity are synonymous expressions constituting one primary group, and that moral and impulsive insanity are but *subdivisions* of the former. The acts in all their manifestations alone form the subject of our inquiries.

It is necessary, gentlemen, to have impressed upon your mind at this juncture, a matter somewhat perplexing until properly explained, one that even medical men not sufficiently familiar with the Protean manifestations of insanity but too frequently overlook, namely, that the existence of intellectual insanity points to a perverted or disturbed condition of thought, and wherever this exists, a disordered state of ideas will exhibit itself in the *words* of the patient as expressive of morbid ideas.

Whenever, on the contrary, the emotional faculties are distorted, discordant *acts* springing from disorded *feelings* force themselves upon our attention as the phenomena to be studied and investigated. How do we manifest our feelings? Is it not by our actions? "Feelings mirror the real nature of the individual, and are the springs of action." Therefore as you study perverted thought by the expressions of incoherent words, so are you to study the disturbances which exist in the affective or emotional faculties by the development of insane *acts*.

Thence in some forms of insanity, all the phenomena are to be studied by insane *words*; in other forms—and they are multitudinous in their varieties and shadings—the manifestions of insanity are to be studied by insane *actions alone*.

In addition to this it might be stated that the *fundamental fact* connected more or less indirectly with all forms of insanity is always perversion of the affective life; it is the underly-

ing current influencing and moulding all other varieties of the affection, insane manifestations and phenomena.

Persons, at the commencement, generally become insane through a want of proper co-ordination of their feelings. This is the first step outside the limits of mental health. Affective insanity is the deeply-rooted morbid state, of which all the other phenomena are the outcroppings. Hence intellectual insanity is nearly always preceded by the affective form. Again, if the intellectual form be developed, it is usually in *combination with the affective form*, and if it be cured, *the affective form generally lingers, and is the last to disappear*. We can now understand that the *affecti veor emotional form of insanity is the fundamental fact* with which we must thoroughly familiarize ourselves, in order to fully comprehend all the bearings and collateral facts connected with the philosophical study of the general subject of insanity. Affective or emotional perversions, therefore, are the precursors of all phenomena culminating in convulsive action and moral irresponsibility. Esquirol claims "moral alienation to be the proper characteristic of mental derangement." "There are madmen," he says, "in whom it is difficult to find any trace of hallucination, but there are none in whom the passions and moral affections are not perverted and destroyed. I have in this particular met with no exceptions." Maudsley in commenting upon this quotation, adds, "This experience is in entire accord with that of every observer of insanity, and with the principles of a sound psycology. It is the feelings that reveal the genuine nature of an individual; it is from their depths that the impulses of action are born, while the intellect guides and controls; and accordingly in a perversion of the affective life, is revealed a fundamental disorder of the innermost nature, a disorder which will be exhibited in acts, as opposed to intellectual disorder, which will be exhibited in words."

"To insist upon the existence of a delusion as a criterion of insanity, is to ignore some of the gravest and most dangerous forms of mental disease."

The importance of an analysis of the feelings in the study of insanity cannot, therefore, be exaggerated. The deep, occult subtilities of emotional life, constitute the open sesame to psychological inquiry. "By his acts, as well as by his speech, does man utter himself; gesture language is as natural a mode of expression as speech; and it is in insanity of action that this most danger-

ous form of affective insanity is expressed, most dangerous indeed, because so expressed."

His actions are, therefore, the mirrors of his feelings, the outcomings of the innermost recesses of his nature, of that unconcious activity which so often moulds imperceptibly, but surely, the destinies of man.

Men are, therefore, sometimes from disease, unquestionably unable to act rationally, normally and consistently, being, from deep-seated perversion of the affective life, insane. We all study individuals through their actions. Inborn, unconcious influences sway the pendulum of life from the cradle to the grave.

We need not wonder that affective insanity is the most dangerous form of madness; a man with delusions or other evidence of intellectual aberration is soon locked up; but a man emotionally insane, but too often commits some overt act of violence before he sufficiently rivets attention to make public opinion demand his sequestration. Not that I attach undue importance to a given act. On the contrary, as I have stated before, I believe no isolated fact or act in itself capable of proving insanity, no matter how great its enormity, its absence of motive or other unaccountable features.

Suicidal and homicidal propensities—erotomania, kleptomania, pyromania, etc., do not *per se* constitute distinct forms of in sanity as was formerly taught. On the contrary, I believe with Maudsley and Blandford, that such conditions are but purely symptomatic indications of a previously existing insanity. Blandford says "besides the homicidal monomania, we hear of others as erotomania, kleptomania and pyromania."

"Having already stated that I do not consider homicidal monomania to be a specific disease, I still less acknowledge that the acts which these terms indicate proceed from special disorders. They are committed by insane patients of various kinds; the insanity is not likely to be confined to one of these acts, but is sure to be noticeable in other ways, if it exist at all.

To take the last one mentioned, pyromania, we might as well erect into a special form, the window-breaking mania, etc."

Maudsley observes, "So far from the morbid impulse or act constituting insanity, it is but the outward and visible sign or expression of a profound affective derangement, the tendency of which is to manifest itself, not as ideational insanity does, in

words, but in acts, and which for this very reason is much more dangerous than ideational insanity."

"So far from the disease being simply a homicidal or suicidal insanity, it is truly an affective insanity, *one symptom* of which is homicidal or suicidal impulse; the delusion, when there is one, and the homicidal acts are later *symptoms of a deeper lying disease*; and the morbid manifestations of one may be as little within control as that of the other, or as the suddenly arising hallucination is. In the one case the patient is the victim of a morbid idea; in the other of a morbid movement; in both cases, of a convulsion more or less co-ordinate."

Hence the fallacy of attaching undue importance to isolated acts, would sometimes make us confound for a disease what is only a symptom. To establish a diagnosis under such circumstances, necessitates the discovery of other symptoms, otherwise the significance of an isolated act would not be invalidated.

If the public could be made to appreciate this fact, there would be less prejudice against the plea of emotional insanity, and less efforts upon the part of lawyers to bring it into contempt and disrepute by its constant prostitution. The diagnosis of emotional insanity rests necessarily upon so many different proofs as to make it no very easy matter to establish it beyond all possible cavil. Unless it can rest upon the ordinary laws of diagnosis which apply to all other diseases, it should not for a moment be established.

Emotional insanity is therefore known to exist by the history of the case, the existence of heriditary predisposition, the presence of some of the well-known conditions of causation, the change of character, the cessation of social harmony with surroundings, the corroborative circumstances, the impaired judgment of relations, the measuring of the perversion according to an individual standard, and that governed by the common sense or the general consent of mankind, the motiveless assaults upon relatives and intimate friends, the existence of some of the physical symptoms of insanity; in other words, our diagnosis is to be based upon all the above mentioned states, the etiological conditions, the sequence of symptoms, and the general course of the affection.

If you have grasped these facts, you are in possession, gentlemen, of the most important part of this subject, and to recapitulate in a concise manner, I will say, that as, in insanity, the feelings are first affected, it is through them we must study all

collateral phenomena. When a truly *insane* person commits homicide, suicide, rape or arson, it is the *result* of some serious form of insanity, such acts never constituting the insanity *per se*. They are, therefore, merely the outcroppings or symptomatic manifestations of a morbid condition of the emotional nature, and delusions are by no means the only evidences distinctive of mental disease, but are simply symptomatic of ideational insanity.

Overt acts of violence indicate a morbid condition of feeling, incoherent words, a morbid condition of thought, or, to make it plain, *just as insane words are produced by insane thoughts, so are insane acts produced by insane feelings.*

But some of you may inquire why it is that a person may be the victim of affective insanity only and not be necessarily intellectually insane at the same time?

In reply I would state, that such is the case, for the same reason that inflammatory conditions sometimes remain in *statu quo*, sometimes advance, sometimes recede. Is inflammation always followed by ulceration, sloughing suppuration, gangrene and other resulting phenomena?

So in a pyschological development, there may exist simply, the fundamental or affective form of insanity; there may never be developed during the case any manifestation of ideational insanity to complicate the situation; the trouble may not proceed so far.

DIVISIONS OF AFFECTIVE INSANITY.—*Moral Insanity.*—You have heard, gentlemen, perhaps, not very understandingly, about moral insanity and impulsive influences leading persons instinctively to perform certain acts which are atrocious in their nature. I shall discuss the consideration of the subject of impulsive insanity in a few words first alluding to moral insanity.

Suffice it to state once for all, that "*moral insanity is never moral depravity,*" and that in order to establish the existence of moral insanity, the physician regulates himself by precisely the same rules of diagnosis to which I have so recently alluded in the discussion of other forms of insanity. Of late years I have believed, notwithstanding the doctrines of Pritchard to the contrary, that a careful analysis of all cases of moral insanity will enable us to detect some evidences, although oftentimes it must be confessed, very feeble, of sure impairment, of frequent and accompanying mental weakening. Even the classic cases of

Pritchard, the founder of the so-called moral insanity, when carefully examined, will confirm this statement. There is one thing very certain, namely, that moral insanity, a revulsion more or less sudden of the emotional nature, of course produced by *disease*, like all other forms of insanity, is preceded by certain physical conditions, such as hereditary taint, epilepsy, suicidal attempts, "the insane temperament," and other influences which are to be taken into consideration. During our tentative efforts of examination, the diagnosis, therefore, can only become established upon an unquestionable basis, by an investigation of all the collateral and combined facts which lead to the development of moral insanity. Blandford says that "we meet with that form of insanity called *moral*, when the patient, either on the high road to intellectual insanity, or stopping short of delusions, shows his insanity in insane acts which he justifies in general alteration of character and intellectual defect."

A divine distinguished for sanctity, grown gray in the service of the church, suddenly, unaccountably, without adequate cause, commences to steal, becomes profane and obscene, would we not suspect insanity? On the contrary, innate parsimony, meanness, pusillanimity, suddenly and inexplicably replaced by lavish generosity, princely prodigality, magnanimity, and heroic courage, would more than awaken a suspicion of disease in our minds, would it not? Under such circumstances, will not the most skeptical be convinced of the existence of insanity which always implies a change in one's normal self in consequence of disease?

Impulsive Insanity.—In this condition, there is a development of that blind, sudden, instinctive fury very analogous to that condition which sometimes occurs under epileptic influences.

There are strong irresistible impulses to kill, destroy, or to attempt self-destruction and mutilation. Evidences of mental aberration are generally wanting. The victims of this form of insanity are haunted night and day by these morbid propensities which they frequently do not fully comprehend or appreciate, and sometimes even make strenuous efforts to resist.

Those outside of asylums will sometimes voluntarily subject themselves to confinement in order to prevent the indulgence of their impulses. Inmates of asylums will in some instances request mechanical restraints to be applied upon themselves with the same object in view. There always exists this relentless persecution of the victims of impulsive insanity, caused by the very

impetuosity of their furious, passionate and violent propensities. This vicious inclination constantly tends to attest itself in action from constantly culminating phases which, sooner or later, completely dethroning the volitional faculty, manifest themselves in explosive violence, or, as Maudsley contends, in convulsive manifestations.

The secret, then, of the physchological interpretation of this sub-division of emotional insanity is *annihilation of the will power*, which in point of fact constitutes the *very essence* of all insane acts. The particular perversions of the affective life are moulded into actions unaccompanied by the regulative effects of the will.

Of course the diagnosis of impulsive insanity is based upon the same irrevocable laws already fully amplified, and upon which all the other varieties of insanity rest in order to become established. With every inducement, therefore, to avoid a criminal act, and with a complete knowledge of its wickedness, one is yet impelled irresistibly to its achievement. "There is no relief for the pent up destructive energy but in an irresistible utterance of action." It is such cases, therefore, that give rise to serious medico-legal contests.

The impulsive variety, I believe, is never the first evidence of insanity. Dr. Blandford says: "I think you will find if you go to the root of the matter, the act which is supposed to be committed under the influence of insane impulse is rarely, if ever, the first symptom of insanity or brain affection shown by the alleged lunatic. You may be told by friends that they have never seen any insanity in him; but some people cannot see it in five out of six patients in an asylum. If you get sufficient information you will probably discover that he has had former attacks, from which he may or may not have been considered as recovered." Sheppard quotes Sankey to the effect that 'I have taken the precaution to read a large collection of reports, published from time to time in the *Annals Medico Psychologiques*, upon the state of the mind of persons accused of different acts of violence. I have never yet discovered a case in which an act of violence was committed by a lunatic as his first insane act. There are cases in which the patient was not considered insane by his own relatives, or by inexperienced practitioners, but who, on the closer scrutiny of the physician who had studied insanity, was clearly proven to have been so for a long period.'" Motivelessness of the act will be of importance in such cases, although in this con-

nection Wharton and Stille state per contra "*non-discovery* of motive is here taken as proof of *non-existence* of a motive, while it is undoubted that motives may exist for many atrocious criminal acts without our being able to discover them, a fact proved by the numerous recorded confessions of criminals before execution, in cases of which, until these confessions were made, no motive for the perpetration of the crime had appeared to the acutest minds." The burthen of the proof of the existence of impulsive insanity, therefore, rests upon the ordinary laws of medical diagnosis, to establish incontrovertible evidence of its presence or absence. Maudsley says "that there are not only perverted appetites, but there are perverted feelings and desires, rendering the individual a complete discord in the social organization. The morbid appetites and feelings of hysterical women and the singular longings of pregnancy are mild examples of a perversion of the manner of feeling and desire, which may reach the outrageous form of morbid appetite exhibited by the pregnant woman who killed her husband and pickled his body in order to eat it."

As an illustration of impulsive insanity I quote the following from Maudsley: "An old lady, aged seventy-two, who had several members of her family insane, was afflicted with recurring paroxysms of convulsive excitement, in which she always made desperate attempts to strangle her daughter, who was very attentive to her, and of whom she was very fond. Usually she sat quiet, depressed and moaning because of her condition, and was apparently so feeble as scarcely to be able to move. Suddenly she would start up in great excitement, and shrieking out that she must do it, make a rush upon her daughter, that she might strangle her. During the paroxysm she was so strong and writhed so actively that one person could not hold her; but after a few minutes she sank down exhausted, and, panting for breath, would exclaim, 'There! there; I told you; you would not believe how bad I was.' No one could detect any delusion in her mind.

The paroxysm had all the appearence of a mental convulsion, and had she unhappily succeeded in her frantic attempts, it would certainly have been impossible to say honestly that she did not know that it was wrong to strangle her daughter. In fact, it was because of her horrible propensity to so wrong an act that she was so wretched.

It is a sufficiently striking commentary on the present state of the English law, that had this patient succeeded in taking her daughter's life, sentence of execution must have been passed, and might have been carried into effect, notwithstanding she was so entirely insane and irresponsible." I would surpass the limit allotted to this lecture, were I to furnish you, gentlemen, with further illustrations of impulsive insanity. You can consult the literature of the subject, which abounds in them.

In the family of Baron von Humboldt, on one occasion his wife, on returning home, found the servant in tears, who immediately threw herself on her knees, and confessed her inability to remain in the house on account of an irresistible desire to kill their little child. This propensity she attributed to the whiteness of its flesh, which incited her homicidal tendency whenever, whilst bathing and dressing the child, she was left alone with it.

Maudsley quotes Schenck as relating "the history of a pregnant female, in whom the sight of the bare arm of a baker excited so great a desire to bite and devour it, that she compelled her husband to offer money to the baker to allow her only a bite or two from his arm. He mentions another pregnant female, who had such an urgent desire to eat the flesh of her husband, that she killed him and pickled the flesh, that it might serve for several banquets."

Medico-legal Aspects of Emotional Insanity—To the community at large, the plea of insanity is one of the utmost importance. The medical witness, therefore, has a double duty to perform, justice to the community, and justice to the prisoner at the bar; the former demands protection against crime and violence and the latter, *if insane*, has not forfeited his claims to the dictates of ordinary humanity. The abuse of the plea of insanity at the present day is fraught with great evils and is therefore constantly derided by the press and the public.

Yet, gentlemen, I am convinced that your humanity will not permit you to dispute the fact that where real insanity is *proven*, that it would be most unjust, not to say barbarous, to subject to the extreme measures of the law, a person whose volitional powers are impaired or destroyed, and who therefore must necessarily be morally irresponsible.

Hence, I think with Forbes Winslow in his "Plea of Insanity" that it would be proper and just to leave the jurisdiction of

these cases to a medical commission of experts. This was done with very satisfactory results by the late Judge Primm of this city in the Cronenbold case, thereby saving the State the expense of a long trial and doubtful conviction. He organized a commission of five experts who were empowered to examine witnesses under oath, and upon the return they made Cronenbold was sent to an insane asylum, where he still remains.

I am of the firm and unchangeable conviction that simple justice requires that wherever a man, after committing a homicide, be liberated upon the plea of insanity, that *ipso facto* he should be sentenced to a lunatic asylum *for life*, because in case of supposed recovery no one would assume the responsibility of offering an assurance that sooner or later there would not be a recurrence of his dangerous disease which had already deprived one fellow being of life. On the contrary, every physician is well aware that one attack of insanity predisposes to the development of subsequent attacks and that therefore from the very nature of the act, and the probability of recurrence from the very nature of this disease, if a man has once deliberately taken the life of a fellow creature in consequence of want of proper volitional control, produced by the disease of the brain we term insanity, then for life he should be deprived of liberty and never again be afforded a chance to perpetrate other deeds with which to shock and paralyze the comunnity in which he lives.

When Joseph Fore, after being acquitted upon the plea of emotional insanity, was liberated in this city, it was simply an outrage and injustice which no terms are strong enough to condemn. Subsequent events proved conclusively the dangerous and destructive tendencies of this man, whose days should have been passed amongst the insane instead of convicts. Physicians therefore should pass upon the plea of insanity—not lawyers or judges; the former studying the phenomena of insanity with patience and accuracy, while the latter are utterly ignorant of the necessary fundamental knowledge of the subject.

Physicians are constantly with the insane. They examine the brains of those afflicted with mental disease, after having previously versed themselves in the laws of brain physiology. Clinical, physiological and pathological research and study, therefore, peculiarly constitute them the interpreters of the manifestations and phenomena of the mind diseased. Would it not be absurd to require a physician to pass upon some abstruse

and important legal question, or some mechanical problem, or metaphysical proposition?

Who is more familiar with all the phases, complications, variations and Protean characters of mental alienation than the psychological physician? Therefore, is it to be wondered at that there is such a wonderful antagonism existing betwen medical and legal minds upon this vexatious sea of contentions concerning emotional insanity?

Antagonisms the more to be regretted because those who from their studies and vocations must necessarily keep a abreast of the progess constantly being made in the field of psychological medicine, who are particularly and practically adapted, therefore, to examine into these questions, constantly find themselves opposed and thwarted in their aims in the right direction, by minds guided more by legal acumen than enlightened by the present scientific status of the questions involved.

Hence the breach is constantly widening. Hence the non-professionial observers of the contest from day to day grow more skeptical, humanity suffers and the discoveries of science are rendered less available.

We have already referred to the question of motive, but in this particular connection a few more remarks may be added in consideration of the importance of the subject.

When a son kills his father, not influenced by passion, the desire of inheritance or any other cause, a strong suspicion and presumption of insanity would exist. When a mother destroys six or seven of her children to send them to heaven, the same doubts of her sanity would suggest themselves. But, gentlemen, you must be made aware that the insane are influenced by the ordinary motives of human action equally with persons of incontestable sanity.

If you visit an asylum and strike one of the patients he will resist your violence and strike back; if your bearing be insulting it will immediately provoke resentment. In the ordinary management and discipline of institutions for the insane these facts are recognized, and the entire moral treatment thereby influenced. They are therefore punished or rewarded in a paternal manner when the necessities of their case demand such a recourse, otherwise the rules and moral treatment which form the most important factors in promoting their restoration would be without success. Hence the maxim never to be lost

sight of in dealing with the insane consists in "kindness and firmness," inasmuch as they allow themselves to be swayed by motives like other people.

Then again there are sane people the interpretation of whose motives is but too often an inexplicable mystery, and we would have to plunge very deep into the labyrinths of the human heart, into the innermost recesses of the soul, to be always successful in our efforts in this direction.

Should lunatics be hung? It seems hardly necessary in this enlightened age to discuss such a question, yet the subject occasionally is re-agitated notwithstanding its barbarous stupidity. Some claim that as lunatics are dangerous, expensive and of no possible benefit to the community, that *pro bono publico*, they should be hung as soon they perpetrate crime. The atrocious inhumanity of such a sentiment is as disgraceful as it is brutal.

The example of incarcerating the insane in asylums does not prevent others from the same fate. Example, to prevent disease, can exert no beneficial result. Forbes Winslow, commenting on this subject, claims that as well might we insist upon inflicting capital punishmeut upon epileptics because of their misfortune. But would this deter the development of epilepsy in a single individual? As regards the *plea of insanity* Lord Hale's views were extreme. He held that "there must be a defect of the understanding, unequivocal and plain."

Lord Coke held "that whoever by sickness, grief or other accident, wholly loses his memory and understanding" is *non compos mentis*.

Lord Chief Justice Mansfield, in the trial of Bellingham, charged that "the single question was whether at the time this act was committed, he possessed a sufficient degree of understanding to distinguish good from evil, right from wrong, and whether murder was a crime not only against the laws of God, but the law of his country."

Lord Erskine considers "*delusion* where there is no frenzy," to be the true character of insanity. "Viewed, however, as a principle of law, the delusion and act should be connected."

According to the 64th article of the new penal code: "Il n'y a ni crime ni délit lorque le prévenu était en état dé démence an temps de l'action."

Forbes Winslow, in commenting upon the above opinions, states: "I am disposed to express my complete concurrence in

the views of Dr. Haslam on this point, that 'it is not the province of medical writers to pronounce an opinion as to the prisoner's capability of distinguishing right from wrong. It is the duty of the medical man when called upon to give evidence in the court of law, to state whether he considers insanity to be present in any given case, not to ascertain the quantity of reason which the person imputed to be insane, may or may not possess.,"

"If it should be presented," says Dr. Haslam, "that any medical practitioner is able to penetrate into the recesses of a lunatic's mind, at the moment he committed the outrage, to view the internal play of obtruding thoughts and contending motives, and to depose that he knew the good and evil, right and wrong, he was about to commit, it must be confessed that his knowledge is beyond the circuit of our attainment. It is sufficient for the medical practitioner to know that such a person's mind is deranged and that such a state of insanity will be sufficient to account for the irregularity of his actions; and that, in a sound mind, the same conduct would be deemed criminal. If violence be inflicted by such a person during a paroxysm of rage, there is no acuteness of metaphysical investigation which can trace the succession of thought, and the impulses by which he is guided for the accomplishment of his purpose."

As regards these first opinions quoted, I doubt not, gentlemen, that you are sure, from what has been explained to you in the first part of this lecture, that the most dangerous forms of insanity are those in which neither illusions, delusions, hallucinations nor perversions of the intellect generally, are discoverable.

As regards the recognition of the difference between right and wrong it is now an indisputable fact that nearly all the insane with no difficulty make the distinction.

It is the volitional centers which are never spared in all forms of insanity. *Hence in every judicial charge the question to be determined is as to whether or not the criminal pleadimg insanity, whilst recognizing the difference between right and wrong, was able or unable to control his action.*

It would be as rational a procedure to punish a school boy whose antics and grimaces—the result of chorea—are a source of laughter and distraction to his schoolmates, as to inflict punishment upon the insane criminal, who, knowing the difference between right and wrong, has it not in his power to execute that

which his judgment dictates. One is under the dominant influence of "insanity of the muscles," the other under the influence of insanity of the will.

To punish one would be as cruel as to punish the other. One of the most powerful blows which can be inflicted upon the workings of the intellect is that exercised by the presence and influence of insanity, weakening and perverting and even in many cases annihilating the faculties of volition. Without the exercise of the regulative powers of volition, mental convulsion, discordant, incoördinated and automatic actions are inevitable; blind, instinctive and irresponsible conduct results. No moral responsibility, therefore, can exist where insanity subverts the all directing and controlling power of the will whereby resistance is rendered impossible.

Insanity as an extenuating plea in cases of murder requires that the previous condition of the individual's life should be investigated.

Winslow declares "it is necessary to inquire whether the person has at any previous period of his life manifested any signs of mental derangement; if such be the fact, it ought to constitute a prima facie case in his favor."

Isolated facts, when introduced in support of the plea, with no exceptions, in my opinion, nothwithstanding the weight of the distinguished authority just quoted, should be valueless, unless the insanity can be established by a *concurrence* of facts indisputable and conclusive, resting upon the broad principles of medical diagnosis. Upon this point I cannot too strongly insist. In order to facilitate the interpretation of cases in which the plea of emotional insanity is made, Dr. Pritchard lays down the following rules. They are based upon the conjoint observations of Esquirol and himself.

1. "Acts of homicide, perpetrated or attempted by insane persons, have generally been preceded by other striking peculiarities of action, noted in the conduct of these individuals; often by a total change of character.

2. "The same individuals have been discovered in many instances to have attempted suicide, to have expressed a wish for death; sometimes they have begged to be executed as criminals."

3. "These acts are without motive; they are in opposition to the known influences of all human motives. A man murders

his wife and children, known to have been tenderly attached to them; a mother destroys her infant.

4. "The subsequent conduct of the unfortunate individual is generally characteristic of his state. He seeks no escape or flight, delivers himself up to justice, acknowledges the crime laid to his charge, describes the state of mind which led to its perpetration; or he remains stupefied and overcome by a horrible consciousness of having been the agent in an atrocious deed."

5. "The murderer generally has accomplices in vice and crime; there are assignable inducements which led to the commission, motives of self-interest, revenge, displaying wickedness premeditated. In some instances, the acts of the madman are premeditated, but his premeditation is peculiar and characteristic. There is also a presumption of insanity where the individual has either been previously insane or affected by epilepsy."

It is therefore self-evident, gentlemen, from all that has been said, that while insanity in general is "a reasoning unreason," yet in the emotional or affective form of that disease, we are to ignore the particular morbid manifestations of thought as expressed in words, and confine ourselves to the study of the actions, which portray a disordered condition of feeling. The plea of emotional insanity, we have ascertained, so far from being one of a trivial nature, and easily maintained, as popular prejudice might induce you to believe, is of an intricate and complicated character, requiring for its establishment a most thorough knowledge of the philosophy of the general subject of insanity, and no ordinary powers of observation and analysis. In addition to this, the physician investigating the phenomena of emotional insanity should possess earnestness, perfect candor and an unbiased mind. Leaning in one direction or another, redounds to the discredit of science and the still further degradation of a well founded plea, which, when resting upon the basis of a careful diagnosis, is sound in theory as well as practice and of great service in a philanthropic point of view. When abused, as is too often the case, the plea can only result in the perversion of justice and professional disgrace, the infliction reaching not only the individual but society at large.

Original Contributions.

ARTICLE XXIX.

POST PARTUM HEMORRHAGE. By JOSEPH WORKMAN, M. D., of Toronto, Canada.

I have read, with much interest, in the February number of THE JOURNAL, the report of Dr. Maughs' paper on post partum hemorrhage, and of the discussion in the Medical Society to which the reading of it gave rise; and as the subject is one of very high importance, and has for nearly half a century engaged my especial attention, I venture to ask of you a little space in your columns, for a few observations, which I trust may not be unworthy of the polite consideration of your readers.

I am aware that the efficacy of injections of various fluids, in the restraining of this formidable hemorrhage has of late years been highly extolled, and I question not that the gentlemen who have given trial to this method of treatment, have realized the excellent results which they have recorded; at the same time it is not denied that unpleasant, or even perilous, consequences have occasionally ensued, and it is the more to be regretted that these have most largely been provoked by that form of injection, (solution of per sulphate of iron), which is probably the most potent of all the remedies which have been accredited as suppressors of uterine hemorrhage. Having myself, for the simple reason of never having employed the per sulphate injection, had no experience of either its merits or its demerits, I venture to offer no opinion on its therapeutic agency. Its efficiency may, or may not be, the result of blood coagulation within the uterus, and extending into, and sealing up, the denuded uterine sinuses, though I should regard this *modus operandi* as a rather unpropitious process, and therefore not so desirable or safe as any other method which may ensure arrest of hemorrhage by perfect and persistent construction of the uterine fibres. We know that in

ordinary cases of safe labor, this is nature's course of action in preservation of maternal life, and in every department of medicine the nearer we can approach to her line of action, the better for the fortunes of our patients, and for our own reputation. If we arrest uterine hemorrhage, not by physiological constriction, and closure of the gaping sinuses, but by corking these up, with induced, firm, adherent blood clots, saturated with a hardly innocuous mineral solution, we may have done something more, and a little less, than should have been our simple purpose. These clots are undesirable foreign bodies, of which nature must struggle to relieve herself, as best she may; until she has effected this riddance, our patients cannot be said to be clear of danger.

In a paper which I had the honor of reading before the Canada Medical Association, at the annual meeting of 1877, in Montreal, I drew attention to "*the use of acetate of lead in large doses, in post partum and other hemorrhages,*" and I was gratified to find that my views in relation to the safety and efficiency of this plan, were amply corrorborated by several of the most experienced members in attendance. I am also able to state that from every one of my old pupils, who attended my lectures in the Toronto School of Medicine, over five and twenty years ago, I have invariably received the most unhesitating confirmations of the supreme value of acetate of lead in *large* doses, in the control, not only of uterine hemorrhages, but of some other forms, and not in a single instance have I ever learned of any unpleasant, much less of any dangerous consequences.

In my days of student life, we were all taught that acetate of lead was, in large doses, an "*irritant poison.*" It is so designated in the "Dispensatory of the United States," sixth edition, 1845. Christison, in 1844, treating of this substance, says that, "though certainly an irritant poison, it is not very energetic," and that he has "often given it in divided doses to the amount of eighteen grains daily, without remarking any unpleasant symptoms whatever, except once or twice slight colic."

I am not at all surprised to learn that symptoms of colic followed the exhibition of the acetate *in divided doses*, to the amount of "eighteen grains in twenty-four hours," for I never but once saw any unpleasant results from this remedy, and that one was a case in which, in consultation, I failed to induce my professional friend to venture beyond five grain doses, and then

only in form of pill, combined with opium, to both of which methods I objected. In that case I saw for the first time in the field of my observance, the genuine *lead gum*, and I believe slight colicky symptoms were presented. My usual dose in post partum hemorrhage was one dram, dissolved in half a tumbler of water, of which I first gave half, and if this provoked speedy uterine contraction I gave no more; but if it did not I never hesitated to go farther. I took care only to use fresh samples, though even if some carbonate chanced to be present, this being insoluble, would soon fall to the bottom of the glass. I never added acetic acid; first, because it is unnecessary when we give the pure solution; secondly, because I believed chemical transformation is more likely to be facilitated than retarded or prevented by this addition. I never conjointly, or in alternation, gave opium, because I believed that the more speedily the salt was voided from the body the less likelihood of chemical change, and I often observed that large doses induced early alvine evacuations.

The promptitude with which large doses excite uterine contraction has often surprised me; and this fact has been most noticeable when instant vomiting (which however is not a general occurrence), has been provoked.

Some of my old pupils have told me they have given it in double, or even in treble the doses taught by me, and always with good, never bad results.

In profuse hæmoptysis, I have, within twenty-four or forty-eight hours, administered four, six or even eight drams, without the slightest injury, and with signal hæmostatic success Finally I venture to say that pure acetate of lead, in *large* doses, is the surest and safest of all our medicinal incitants of post partum uterine contraction.

Reports on the Recent Progress of Medicine.

ARTICLE XXX.

SURGERY (FROM THE GERMAN.)

BY F. J. LUTZ, M. D.

EXPERIMENTAL AND ANATOMICAL INVESTIGATIONS CONCERNING ERYSIPELAS—THE ETIOLOGY OF ACUTE INFLAMMATIONS—INJURY OF THE RIGHT FRONTAL LOBE OF THE CEREBRUM—APHASIA—DEATH—OBLITERATION OF VARICOSE VEINS.

Among the many valuable papers read before the Seventh Congress of the German Society of Surgeons, which met at Berlin, April 10–13th, 1878, an essay by H. Tillmanns, entitled "Experimental and Anatomical Investigations Concerning Erysipelas," is especially interesting. Although erysipelas is said to have occurred "at all times and in all regions of the earth's surface," there are, nevertheless, in spite of the most extensive literature on this subject, many mooted questions connected with it, and of these none is of greater importance than that of its contagiousness.

It is well known that opinions concerning this point vary widely. English physicians have, since the time of Graves, declared their belief in it, and in this country, whatever may be the theoretical conviction of surgeons in practice, it has, so far at least as we have been able to learn, been looked upon and treated as a contagious disease. In France the theory of its contagiousness is continually gaining new advocates, whereas in Germany it has generally been denied or considered contagious only in exceptional cases.

In his experiments Tillmanns first investigated the possibility of transmitting erysipelas from a patient to a healthy person by inoculation; whether the lymph, pus, the serous fluid of the vesicles and the blood produce a specific, i. e., contagious effect.

Should this be the case, the contagious nature of the disease would be established. To determine this question Tillmanns made 25 experiments with squirrels and dogs. Recent or granulating wounds of the skin and mucous membrane were infected, the experimenter using all the precautions necessary. The infecting material consisted of the œdematous fluid from the portions of the skin affected, the contents of the vesicles, liquid and dried, blood and pus. Of the 25 inoculations 5 were successful, a sufficient number the author thinks to establish the contagiousness of the disease.

Of the five successful cases three were inoculations from man to the animal, and two from one animal to another. He thinks it probable that were inoculations made from man to man positive results would more frequently be obtained.

In one of the experiments (7th) a young dog about ten weeks old was inoculated by a subcutaneous injection. No local disturbance was produced, but symptoms indicative of a general intoxication (fever, diarrhœa) and an abscess at a distant site appeared, which goes to show that poison does not always infect the organism at the site of its entrance, but may after the lapse of considerable time evince itself at some remote place. This was corroborated by Dr. Lange, who related, in the discussion which followed the reading of Tillmanns' paper, that he had suffered nine times with erysipelas in the left half of the body. The disease had been brought about by small punctures made by a needle used in preparing specimens for the microscope. It never appeared first at the site of infection, but at the elbow or in the upper arm and thence spread equally in all directions.

This observation also speaks very strongly against what some authors have termed "spontaneous" erysipelas, which is said to occur especially in the face. Superficial lacerations of the adjacent mucous membranes may be considered the starting point of the disease; but it is not necessary, according to the observation just mentioned, to suppose a primary erysipelas of the mucous membrane, upon which the facial erysipelas followed.

Some light may also be thrown by this view upon deep-seated inflammations, such as osteo-myelitis, which may have their origin in cutaneous infection.

Concerning the period of incubation and the way in which the erysipelas began, it was observed in three cases (5, 10 and 17) that the local and general infection occurred simultaneously.

A 2 to 4 per cent solution of carbolic acid completely destroyed the efficacy of the erysipelatous poison.

According to Kocher, who contributes an article on the etiology of acute inflammations, the same causes which produce traumatic inflammations are also the excitors of acute inflammations in deep seated-organs. Minute corpuscular elements, which are introduced into the wounds from without, are, as antiseptic surgery has demonstrated, the cause of inflammatory action and not the injury the part has sustained. The difference between a simple, local acute inflammation and the most acute pyæmia is one of degree only.

His deductions from quite a number of observations and experiments are, that acute strumitis as well as acute osteo-myelitis, and perhaps every acute inflammation of deep-seated organs, is an infectious disease, produced by the same factors which cause putrefaction on the surface of the body.

The infecting material may enter the system through the alimentary canal, in some cases through the respiratory tract, the mucous membrane of the uterus, or through any of the primæ, viæ, as also through small abrasions of the cutaneous surface; nor does it always produce an inflammation at its site of entrance. This latter fact is also proved, as will be remembered, by the experiments of Tillmanns' detailed above.

The most probable supposition is that the infecting particles are micro-organisms (cocco-bacteria septica.)

In the *Centralblatt feur Nevenheilkunde*, Wernher reports a case of injury to the right frontal lobe of the cerebrum, which is worthy of record from the fact that it demonstrates the existence in man of centers of motion, for certain groups of muscles in the surface of the anterior lobe of the cerebrum, arranged in the same manner and in like numbers as they have been shown to exist in the dog, and also because only in rare instances has abrasion followed lesions of the right hemisphere.

The patient, æt. twenty-two, was struck on the right side of the head with a heavy, sharp stone. He had fallen to the ground, but was stunned for a moment only; he soon recovered consciousness and was able to walk the greater part of the way to the hospital and ascend the stairs unassisted. On examination a wound two and a-half inches long, extending from the wing of the sphenoid to the frontal bone and a fissure one-half inch in width were found. A circular piece one inch and a-half

in diameter was separated from the inner table of the skull and depressed. Pulsation of the brain could not be recognized. The fracture involved the region of the middle meningeal artery and the fossa of Sylvius, which explains the hemorrhage at the beginning. No sensory or motor disturbances; temperature and pulse normal; patient declines operative interference; simple dressing and ice applied.

After two days the patient became aphasic and peculiar convulsive phenomena appeared, which were always limited to certain sets of muscles. They were first observed on the left side and afterwards most frequently on the right side. The convulsions appeared most frequently in those muscles of the face and neck which are supplied by the facial nerve. Voice clear and sonorous, twitching, unilateral movements of the platysma were also observed. Spasmodic movements of the extensors and flexors of the fingers; fronators, supinators and the flexors of the carpus were not involved. Similar movements were observed in the leg; the elbow was not involved, nor the muscles of the upper arm or thigh.

Next morning the patient was speechless; pulse, 130; temperature, 39° C. The convulsions were very vehement during the night. After a few hours they ceased; the limbs seemed paralyzed; no reaction. The depressed bone was now removed because of the supposed incipient inflammation of the brain. The operation did not relieve the functional disturbances, nor was any change produced by venesection. Four days after the injury the patient died. Temperature 41.5° C.; hypostasis of the lung.

Post mortem: Under a thin layer of pus, the dura mater was covered on both sides by a hemorrhagic exudation; no perforation; several scattered layers of pus in the arachnoid; brain hyperæmic and superficially softened; on the margins of the gyri, especially of the middle gyrus bordering on the fossa of Sylvius; some apoplectic suggillations; brain œdematous; meningeal artery torn in its sulcus; diastasis of the coronary suture.

M. Dovat describes again in the *Bulletin de la Societie de Chirurgie* the method employed by him for obtaining the permanent occlusion of varicose veins, and supports it with the record of seventy-three cases thus treated, with one death. He ascribes the

death in the fatal case to unnecessary and accidental puncture of the vein.

The method is as follows: The point of a pin or needle is entered vertically through the skin close to the side of the vein, carried beneath it and brought out through the opposite side of the vein at a point corresponding to that at which it entered. The pin is then raised so as to allow a second pin to be passed at right angles to and beneath the center of the first, perforating the vein at four points. The operation is completed by placing a figure of eight suture rather tightly about the projecting ends of the pins. The pins should be removed after the fourth and before the seventh day. M. Dovat prefers steel needles one inch long, and one millimetre thick, flattened and slightly curved at the points.

L. A. S. (L. A. Sayre?) has employed this method in one case, with good result, obtaining complete obliteration of the internal saphena vein in five days, without suppuration or the loss of a drop of blood, and with no more inconvenience to the patient than the slight pain of the puncture and the necessity of remaining in bed for a week.—*Archives of Medicine.*

DISEASES OF THE NERVOUS SYSTEM.

BY C. H. HUGHES, M. D.

1. Metallo-Therapy—Metalloscopy—Neuro-Psychic Therapy.
2. The Microscope in the Diagnosis of the Neuropathic Diathesis.
3. Backward Progress in Psychiatry.
4. The Sweat Nerves.
5. The Tendon Reflex Phenomenon.
6. Cerebral Thermometry—Thermometric Localization of Intra-Cranial Disease.

1. The subject of metallo-therapy is just now occupying the attention of European therapeutists, reviving the remembrance of Perkins and his metallic tractors in this country, and the first writings and experiments of M. Burq, twenty-five years ago in Europe, revealing also the wonders of Braidison, mesmerism and the waning memory of Gen. Pleasanton and the

fading wonders of his miraculous blue light. It will be remembered how some years ago the wondrous cures performed by Perkins ceased when it was disclosed that a pair of wooden compasses in the hands of a medical neighbor showed equally wonderful results. Nevertheless the *London Lancet* thinks "the subject is worthy of attention, and the results of recent experiments in trustworthy hands, are of sufficient significance to elicit the consideration of the profession."

We think so too. A vast field in the domain of therapeutical experimentation remains as yet but imperfectly explored; That of pure neuro-psychic therapy, which, if we may be pardoned for one philological temerity, we consider a better term than metallo-therapy, for it may be used to signify the remedial effects of all peripheral impressions, producing perceptible local chemical or physiological change, and this term embraces all that has been recently done by what is called metalloscopy and possibly by metallo-therapy (though in regard to the latter we suspend our convictions for the present), as well as the remedial effect, from time immemorial, of expectant attention, exaltation of hope and confidence, the laying on of hands, thermal friction, local cold heat and the potent influence of magnetism which have fallen into the disuse through the disreputable practices of Messmer.

From the periscope of the *Philadelphia Medical and Surgical Reporter*, of Dec. 21, 1878, we give a condensed synopsis of later experiments in this direction by distinguished men in Europe.

Eulenberg, repeating Reynard's experiment with the electric plates and galvanometer applied to the skin, came to the following conclusions:

a. The same plates applied to various healthy individuals on the same parts of the skin and under similar conditions appear to be more active in some cases than in others, sometimes having almost no effect.

b. The galvanometric intensity of the metals is by no means alike in all healthy individuals; zinc, more effective than gold in some persons, is less so in others, and *vice versa*, the proportions even vary at times in the same individuals (owing, perhaps to the dampness of the skin).

Westphal, almost simultaneously with Eulenberg, after making himself personally acquainted with Charcot's experiments and selecting like cases (effeminate, hysterical, hemi-anæsthetic indi-

viduals), began by using silver coins and found, as Charcot did, that sensibility returned sometimes locally, at others in the entire side. Sometimes he found, corresponding with the increased sensibility of the anæsthetic spot, opposite and symmetrical anæsthesia. Iron, magnetic stone, varnished copper, sealing wax and bone markers produced similar but weaker results.

M. Thermes ascertained in the cases of two hysterical patients that thermal agents are capable of acting in the same way, ice in one case and hot water in the other causing the hemi-anæsthesia and contraction to disappear.

Dr. J. Hughes Bennett, (*Brit. Med. and Surg. Jour.*, for Oct., 1878,) made a large number of experiments in cases of hemi-anæsthesia and pointed out to several who were present some of the facts here described and that the phenomena following external applications to the anæsthetic skin are perfectly genuine, and the manner in which the experiments were performed certainly give little opportunity for voluntary deception or partiality of theory on the part of the observer. So far as his experience went the phenomena were not due to any special metallic action, as the application of wood was followed by all the results attributed to the metals. So far as he could judge the changes were due to the effect of expectant attention and the result of the manipulations, acting on the body through the mind. This is in accord with known facts.

We now come to some recent observations of our own in this direction.

CASE I.—Mrs. C——, æt. 53 years, the mother of several grown sons and one daughter; of an excitable nervous temperament, her equanimity being so greatly disturbed, when any of the family are sick, that she scarcely knows what "she is about;" came under treatment for slight chorea of the right orbicularis palpebrarum muscle last summer, but recovered under use of Fowler's solution and galvanism; came again in December complaining of loss of feeling in the left hand, arm, foot, and leg. The moist sponge electrodes connected with the battery but with disconnected current, were applied twelve different times, with gradual and finally by complete disappearance of all anæsthesia.

CASE II.— Miss Beck, aged 20, daughter of the above, has had repeated hysterical attacks. She sometimes falls down un-

conscious and has a tumultuous heart at times; lately "paralyzed (?) in her left arm, so that she could not feel anything.

An application of sulphuric ether to the back of the head and upper dorsal region made a profound impression, peripheral and central, and cured her paralysis, she said. We applied no anæsthesiometric tests.

Mr. C, æt. 19, brother and son of the above, became suddenly affected in the spine with tenderness over the sixth dorsal. He "come to have it cured in time," he said. An etherial lotion caused it to soon disappear. The father of this young lady and young man is very delirious and flighty whenever he has slight fever.

A very clear description of what is called metallo-therapy may be found in an interesting article by Dr. H. Gradle in the Oct., 1878, No. of the *Chicago Jour. of Ment. and Nerv. Diseases.* The writer says: "Each patient is said to be sensitive to *only one* metal, rarely more, and hence the first step must be to discover the idiosyncrasy of the patient. Mr. Burq gives the following list as the scale of frequency of influence of the different metals: iron, copper, zinc, gold, silver, tin, rarely platinum, and probably arsenic and antimony. Metallic discs of the size of large coins or wooden discs coated with the metal are employed. In one to fifteen minutes objective changes can be seen. The anæsthetic skin, formerly cold, pale and almost bloodless when pricked, now becomes reddened, warmer and even hyperæmic. The patient, formerly insensible to deep pricks, will now show sensability to a mere touch of the pin. At the same time the special senses return to their normal activity and the dynamometer indicates now a full strength of the formerly infeebled muscles. Where a contraction exists it usually disappears.

But on the other, formerly normal side of the body, a peculiar change can now be found. Exactly what one side has gained the other has lost. When the anæsthesia disappears only in the vicinity of the metallic discs, the symmetrical spot in the previously normal sides of the body loses it sensibility to the same extent, while in some cases in which the metallic application removes the existing anæsthesia completely there still remains a hemi-anæsthesia, it being only transferred to the other side. * * The original anæsthesia disappears at first at the point of metallic contact. If the discs are now removed, the return of sensibility continues and finally the original

anæsthesia disappears completely. At the same time the loss of sensibility of the other side follows the identical course. The pneumonia lasts rarely longer than one day in any hysterical case, when everything returns to its former condition. If, however, the metal is left in place continually * * * the returned sensibility, instead of continuing to spread, suddenly disappears again, a corresponding change taking place also on the other side. Both sides have returned to their orignal condition, while the metal is still applied. * * * This state Mr. Burq calls the return anæsthesia. It is called by Charcot a *test for the hysterical diathesis*. If in a hysterical patient all manifestations of the disease have disappeared in the course of some treatment, the application of the metal to which she was sensitive previously, causes no change whatever in the case of a perfect cure. If, however, the hysterical diathesis still exists, though latent, the metalloscopic application gives rise to a feeling of numbness, *malaise* and drowsiness, often causing sleep, while the sensibility disappears completely at the place of application. This is Burq's experience.

"The claims which M. Burq asserts for internal metallo-therpy are even more marvellous. That metal which previous metalloscopic attempts have shown to possess an influence when applied extensively, is given to the patient internally in ordinary form and dose, with the result, he claims, of a perfect cure of hysterical symptoms and diathesis. As a test for the complete cure he reapplies the metallic disc; if no return anæsthesia follows, the disease is eradicated. Charcot, while occupying a perfectly neutral standpoint, gives Burq the credit of having ameliorated the condition of four cases of hystero epilepsy, all of which he had known for years as unmanageable by any treatment. * * * Another case of long-standing hysteria completely cured by Burq, by the internal use of silver, according to the metalloscopic indications, is reported by V. Revilliot, (*Gaz. du Hosp.* July, 1878,' and others have since been published.

"Results like these," Dr. Gradle also says, "vouched for by responsible parties, render further investigation a duty."

Alluding to the propensity which hysterical patients have for simulation and deceit, Dr. Gradle also says: "Perhaps one of the best guards against deception on the part of patients, is the announcement of results in hysterical amblyopia, the details of which the patients could not possibly know beforehand.

The extreme periphery of the healthy retina cannot perceive all colors with ordinary illumination. The field of vision, larger for the perception of light in general, than for any one color, is not the same for the different colors. Violet can be perceived only by the more central parts of the retina; green has a larger field of vision; next in order are red, orange and yellow, while blue is still perceived by the most peripheral zone. * * * This normal condition is exaggerated in hysterical amblyopia. Besides the reduced visiual acuity we find in this trouble a characteristic limitation of the field of vision for light in general and still more so for colors. * * * On applying a disc of active metal to the temple of such a patient, the observer can follow step by step the increase of visual acuity and the gradual peripheral extension of the color peceiving zones. * * * The positiveness and unanimity with which different patients pronounce upon the order of appearance and disappearance of the colors, precludes all suspicion of deception."

Metalloscopy and metallo-therapy present us with some new facts, though the explanation of them is to a great extent old and consists in nerve mental impression. This would seem to be the true explanation in many cases at least, from the fact that when the patients recover the remedies no longer affect them. They no longer expect nor desire to be impressed by the applied metals and from a fact observed by us in one instance, that the surface changes did not occur in the application of the metals during sleep. But there may be some things unexplainable upon the theory of expectant attention.

That the latter may and does explain much, as Dr. A. De Wattville, in *Brain* for Jan., says "is a proposition which will not be denied, but that it explains all, requires more conclusive argument."

"It is a curious fact," says Dr. De Wattville further, "that the application of discs, metallic or wooden, should have such a marked influence upon the imagination of the patient. It would seem that the more striking application of electricity from an induction coil, for instance, ought to enlist as much interest on her part and act as powerfully upon her psychical faculties. In Salpetriere, the patients, inured as they are to the most varied experiments, yet find the simple application of metal plates successful.

Again, however, imaginative hysterical patients may be,

we find that in them the effects are but transient, while in old standing organic lesions, permanent cures are effected. * * * Entirely unexpected success can hardly be put to the credit of expectant attention. * * * "Under given circumstances the nervous system may become more sensitive to electrical influences, as it does to light, sound, etc. * * * * * * * * *

"Many people of nervous temperament are highly sensitive to changes of atmospheric potentials. Lombard has shown that mortality and electrical tension rise and fall together. Prof. Scutetten has given reasons for assuming that mineral waters owe their efficacy more to their electrical action than actual composition.

That terrestrial magnetism may have an influence on our bodies is far from improbable, and Dr. Horn has tried to establish some connection between certain diseases and magnetic fluctuations.

Grandeau and Bertholet have found that plants can be arrested in their growth by disposing about them a few iron wires." Dr. De Wattville sums up by saying, "Under certain disturbed conditions the nervous system appears to be sensitive to influences, various in their nature and obscure in their mode of action. The facts are too numerous and too well supported to be doubted; the explanations of the facts hitherto given are not sufficiently supported by experiment to be regarded as satisfactory. Whatever the fate of metallic and magnetic therapy may be, there is not the slightest doubt that the researches to which they have given origin will be followed by a rich harvest of pathological discovery in a very important and obscure field of medicine," and he ascribes "all honor" to Charcot for having the courage to bear the charge of reviving played out and flimsy superstitions."

Explanations of these phenomena are still in order, and will doubtless be forthcoming.

In addition to those already alluded to Adamkiewicz finds an all sufficient explanation in mechanical irritation, because a mustard plaster and pressure developed the same results.

Possibly some of the cases may be explained upon another supposition, namely, that of hemi-somnolency of the centrum commune which is aroused to normal activity by the operator.

2. In the initial number of the *Archives of Medicine*, ap-

pears an article by Dr. C. Heitzman, interesting from the novelties if not on account of the scientific varieties of its statements, though the author, with the characteristic enthusiasm of microscopists, doubtless believes in their truth and thinks the facts he has laid before the profession may convince even the most skeptical.

We do not give what here follows as indubitably attested progress, though we can not ignore it in a report on progress simply because we are incredulous. We may premise, however, that if what Dr. Heitzman asserts is diagnostically true, we have certainly reached an age of progress in medicine which calls for the pen of a Maunchausen to record its achievements.

Such microscopists are nothing if not startling. Such as they, found the specific cancer cell and the mythical vibrio of venereal. Where are they now? We remember them only as sells. And the spore of malaria, the germ of yellow fever and the neuropathic diathesis now come up at the bidding of these far-seeing *visionaires* and like Banquo's ghost will not down.

We like the microscopists and could not do without them, but an atmosphere of credulity and enthusiam surrounds them all. They delve in the domain of the mysterious and sublime and some of them inhale too much credulity. A kind of scientific superstition sometimes possesses them unawares, no less reprehensible than the superstition of ignorance.

The following appertains alone to our department. The whole of Dr. Heitzman's paper, however, will be found interesting reading: "Last season a young physician asked me whether I believed in the marriage among kindred? He fell in love with his cousin, and so did the cousin with him. I examined his blood, and told him that he is a "nervous" man, passes sleepless nights, and has a moderately good constitution. The condition being suspected in the kindred lady, marriage was not advisable for fear that the offspring might degenerate. So great was his faith in my assertions, that he gave up the idea of marrying his cousin; offering her the last chance, viz., the examination of her blood. This beautiful girl came to my laboratory, and, very much to my surprise, I found upon examination of her blood a first-class constitution. The next day I told the gentleman, "You had better marry her." (pp. 65 and 66.) Dr. Heitzman claims that has he arrived at a point of perfection,

which allows him to tell the constitution of a person without knowing anything of his former life. (p. 64.)

Dr. Heitzman says many good and true things in regard to the value of the microscope in diagnosis, but claims too much progress.

3. Dr. George H. Savage has recently declared ("Guy's Hosp. Reports," third series, vol. xxiii, 1878, p. 161) that, "the mere producing of sleep does little if any good in the majority of cases of insanity," and he relies chiefly (page 164) on moral treatment by means of the right mental levers," whatever those implements may be. Few authorities, probably, will concur in this view. Dr. Bucknill, for instance (page 734), says, "It is, and must be, a great point gained that a patient suffering from acute mania should have a good night's sleep secured for him." Dr. Blandford, again (page 230) speaking of acute delirious mania, says, "But many of these cases are cut short and cured like delirium tremens if we can procure one long and sound sleep.

He has contributed articles to the *Dublin Med. Press* and *Canada Med. Record*, for December, on the treatment of insanity by drugs, in which the above statement is reiterated. Dr. S. says some good things, though they are not new, in regard to camphor and chloral in combination, for the erotic and lascivious insane, etc., and does not think much of conium, but we venture to challenge him to cite a single case of acute mania where the quieting influence of hypnotics on the brain was not beneficial in the conservation of the brain force and the prolongation of life, at least.

"Acute mania, in particular, accompanied by violent delirium, continual agitation and prolonged wakefulnes, requires an energetic medical treatment. In these cases, sedatives are of great use. Chloral and bromide of potassium, when employed at the commencement of the disease, have a marked effect; they modify and preceptibly diminish the violence of the symptoms. They bring on a refreshing sleep and soothe to a considerable degree the excitement of the first stage of the malady."

This quotation, taken from a late report of Drs. Landry and Roy, of Beuport Asylum, Quebec, now on our table, gives the experience of the most eminent alienists, among whom Drs. Landry and Roy are not least.

4. The columns of this journal have contained nothing during the past twelve months or more on the sweating process and the nerves concerned in this function, and a report would be incomplete without some note of what has been done in this direction. We give its readers, therefore, without comment, an excellent condensation of the monograph of Adamkiewicz, by H. G., in the *Jour. of Mental and Nervous Diseases*, for July, 1878:

"Proceeding from the common experience that muscular movements are followed by sweating, he galvanized various motor nerves in man. As a result sweat drops appeared at once on the coresponding portion of the skin, and continued to be formed for a short time after interrupting the stimulation. The sweating region is the portion of the skin over the contracting muscles, but this is always accompanied by sweating of the symmetrical spot on the other side of the body. The perspiration is independent of the circulation, as it occurs equally intensely, and just as soon after compression of the main artery, for instance, the femoral. It can be induced as well by direct galvanization of the muscles as by their *voluntary* contraction. It must be mentioned, however, that Adamkiewicz selected as subjects persons with a disposition to sweat.

To obtain a reflex perspiration he made use of the faradic brush. Its application is speedily followed by sweating of the irritated spot and its mate on the other side. In persons predisposed to sweating, the perspiration, however, is induced soon in all those parts which sweat most readily, normally, such as the palms and soles. This result he expresses in the law, "that the secretion of sweat occurs in man always symmetrically on both sides, and independently of the place of stimulation." The same law holds good when thermic stimulation is resorted to. The contact of a substance some 6–8° C. warmer than the body produces bilateral sweating on those spots most liable to perspiration, such as the soles of the feet, even when the warm body is applied in another locality. A cold substance, on the other hand, will not induce, but rather check, perspiration. Cold, however, is a powerful stimulus to unstriated muscles, and the contraction of the fibres surrounding the sweat glands can force out their contents.

As regards the sweat centers in the cord, Adamkiewicz found that perspiration of the hind paws can continue after division of the spinal cord at the level of the first lumbar vertebra. Re-

moval of the lumbar cord, however, prohibits all further spontaneous sweating of the hind paws. After section of the cord at the level of the first lumbar vertebra stimulation of the central end of the divided sciatic nerve causes a reflex sweating of the other leg. On shortening the lumbar cord by successive slices, it was found that the spinal centers of the sweat nerves of the hind paws are situated in the portion between the first and fourth lumbar vertebræ. This coincides with the centers of the motor nerves of the leg; similarly it was found that the centers of sweat nerves and of the motor nerves of the anterior extremity coincided in their position. The sweat nerves leave the cord with the anterior roots, since reflex perspiration can still be obtained after division of all posterior roots of the lumbar fragment. Histologically we are to infer that the sweat centers exist in the anterior cornua. This supposition was confirmed by a case of poliomyelitis anterior acuta, in which the motor paresis was accompanied by paralysis of the sweat nerves.

After removal of the lumbar fragment of the cord, stimulation of the brachial plexus will still produce sweating of the hind paws. This is due to the influence of fibres joining the sciatic nerve, and coming from the sympathetic. The origin is found in that portion of the cord included between the tenth and thirteenth dorsal vertebræ (of the cat).

Finally, it was shown that the common center of all sweat nerves exists in the medulla oblongata."

5. Since Erb and Westphal called attention to the phenomenon of muscular contraction on tendinous percussion, and its absence in the tendon of the quadriceps extensor femoris in gray degeneration of the posterior columns of the cord, some observations have been made, tending to make the value of this sign somewhat more restrictive than they have claimed for it.

Gowers in England, Hamilton, Bannister, Jewell, and myself in this country have observed that it is not an invariable sign.

Dr. Allan McLane Hamilton, of New York, (*Brit. Med. and Surg. Jour.*, Dec. 1878,) reports four cases of tabes dorsalis, in which tendinous reflexion at the knee was present.

Drs. Jewell and Bannister's cases are referred to in the Oct. 1878, No. of the *Jour. of Mental and Nervous Diseases*, and my own in the Feb. No. of the ST. LOUIS MED. AND SURG. JOURNAL.

Dr. Bannister found the phenomenon absent in two healthy persons and we have seen lately several similar cases. The following are the conclusions of Dr. Allan McLane Hamilton's paper:

"As to the pathological condition which explains the occurrence of the tendon-reflex in some cases, and its absence in others, we must necessarily be very much in the dark. Such variations must depend, of course, upon the location of the affected regions of the posterior columns. It is quite possible that one of the three kinds of fibres described by Clarke is affected while the others remain intact, and from the fact attested by most observers, that the *funiculi cunicati* are primarily attacked, it seems reasonable to suppose that the horizontal fibres, which probably eventually end in the gray matter of the posterior horns, are those impaired in cases in which the "tendon-reflex" has been extinguished. Pierret has made autopsies in patients who died before the disease had advanced far into the first stage, and his investigations prove that the external portion of the posterior columns are primarily affected, and not the columns of Goll. The exemption of these parts, or the affection of the extreme posterior portion of the lateral columns, might account for the presence of a normal or even an exaggerated tendon reflex, but we cannot say, with all the clinical features, that the disease has not been locomotor ataxia in the various exceptional cases brought forward, and these are certainly goodly in number."

6. Since the memorable experiments of M. Paul Broca, in 1877, on this interesting subject, revealing a difference of temperature in the two hemispheres of the cerebrum in repose and other thermometric facts now quite well known to all neurologists, no one has done more in our own country in confirmation of the statements of M. Broca or made more advance in the direction of cerebral thermometry, than Dr. Landon Carter Gray, of New York, whose interesting researches are published in the (*Jour. of Ment. and Nerv. Dis.* Jan. 1879).

By means of thermometric observation Dr. Gray predicted as follows concerning a patient sent him by Dr. Frank W. Rockwell: "I shall certainly expect to see inflammatory changes from the base of the fissure of Sylvius backward along the occipital lobe, as well as that these changes shall be spread around

the base of the fissure." After the death of the patient, "a soft jelly like tumor the size of a hazel nut was found between the horizontal or posterior branch of the fissure of Sylvius and the first temporal fissure, while the whole of the right occipital lobe was converted into a colloid, extremely vascular mass, which gave way under examination; this degeneration also extending anteriorly to the tumor as far as the fissure of Sylvius. There was no apparent disease except at these points."

This, Dr. Gray believes, "is the first case on record in which a diagnosis of the locality of an intra-cranial morbid growth has been made with a thermometer and afterwards verified by a *post mortem examination.*"

Translations from the German.

PATHOLOGY AND THERAPEUTICS IN OPHTHALMOLOGY. [Taken from Prof. A. Nagel's *Jahresbericht euber die Fortschritte und Leistungen im Gebiete der Ophthalmologie.*] By S. POLLAK, M. D., Surgeon to the Eye and Ear Infirmary of the St. Louis Hospital.

GOOD EFFECT OF TENT LIFE IN PURULENT OPHTHALMIA.—PARISOT, (Des bons effets du sejour sous la tente et du barraquement contre une epedemic trés grave d' ophthalmics purulentes. Gaz. des Hop.), describes a highly malignant epidemic of blenorrhœa, which broke out in the Hospital St. Stanislas, of Nancy, among the orphans and foundlings, in 1872. First it attacked the nurselings, which had been put out to nurse, and which were brought back to the hospital in such numbers as the surrender of the territorial district to Germany rendered it neccessary. These were at once segregated. The number in the hospital rose suddenly from 149 to 352, twenty-five of which sickened immediately; of these one lost both eyes, and two one each. After being transferred to other houses, no other case occurred in six weeks; but the epidemic broke out anew on their return to the Hospital St. Stanislas. At last, all the sick, eighty-three, were

placed in a tented camp, in a meadow, between trees. The tents were furnished by the war department, and made of the best stout sail cloth. Each tent contained four small beds. The favorable effect of this open air sojourn was manifested at once, without special treatment, except cleanliness, cold water fomentation and good diet. Prior to that, astringents, nitrate of silver were used, which rather increased the inflammation. They remained in camp from August to November. Every trace of ophthalmia had disappeared, and never returned again.

CASES OF OPHTHALMIC DISEASE IN WHICH ENFORCED EXPOSURE OF THE EYE TO LIGHT AND AIR WAS SALUTARY.—C. R. Agnew (Trans. Am. Opth. Soc.) relates several cases, when exposure of the eyes to the light and air was the chief factor in the treatment, especially in *phlyctenular keratitis*, when the best hygienic surroundings, dietetic regimen, and most approved therapeutic means had failed to relieve the photophobia.

Placed under ether in a well lighted room, the eyes were forcibly opened with a speculum, and for a minute or two exposed to a full flood of light or air, until the surface began to look dry; the excessive secretions were carefully removed from the *cul de sac* with a linen rag. This process was gone through with every other day, in all seven times, and every time with the effect of lessening the intensity of photophobia and the orbicular spasm. The result was in the highest degree satisfactory.

A like proceeding was instituted in a case of double trachoma with panniform cornea of traumatic origin, where photophobia was uncontrolable. The spring speculum was forced in, and could at first be endured only a few moments. But soon the patient learned to open the eyes voluntarily, which made the subsequent treatment comparatively easy.

Another which had been kept in a dark room for nine years was transferred to Manhattan Hospital. There he had to undergo a systematic drill of opening his eyes, which at first was stoutly resisted but as stoutly persisted in, until it was at last accomplished. The long seclusion of light and air blanched his skin, made him very anæmic, but which soon corrected itself under the wholesome hygienic and dietetic regimen.

From these and many similar cases, it may be safely adduced that the hitherto prevailing practice of excluding light and air

in many cases of eye diseases with photophobia, will be largely modified.

[It may not be out of place to add that I have for years deviated from this rule, and almost invariably recommended, and insisted on, as a *sine qua non*, an exposure to light and air in all cases of phlyctenular keratitis, and I never had cause to regret it. I also found that the out patients of the clinic got well as fast, and faster, with fewer permanent lesions, in iritis, in irido-choroiditis, as those who were kept indoors in darkened rooms. A black silk mask, or smoked coquilles is all the shadowing I recommend. I never require or consent to have the room darkened by closing the blinds in and outside shutters and shades, after cataract extraction. The habit of some eye patients of being in a dark room grows upon them, from which they cannot be easily weaned, undermining their health, and thereby retard the cure.—S. P.]

SECTION OF THE CORNEA.—I. VOSE SOLOMON, (*British Medical Journal*) recommends *section of the cornea* in certain diseases of the eye, of inflammatory origin; in abscess of the cornea; in deep seated ophthalmitis which threatens destruction of the eye; in irido-choroiditis sympathetica. He refers to two cases:

CASE I.—A child aged one year, suffering from muco-purulent conjunctivitis, with opaque cornea. On the ninth day when the coujunctivitis had subsided there remained still great photophobia, and large infiltration of the cornea, so that the iris could not be discerned; tension of the eye much increased. S. made a *horizontal incision* near the upper pupillary margin, through the entire thickness of the infiltrated cornea, with an immediate improvement of all the subjective symptoms. After four weeks the periphery of the cornea commenced to clear up; in another month the iris and pupil became visible; no anterior synechia; vision clear.

CASE II.—Scarlatina had caused the left eye of a girl, aged seven years, to become phthisical. In the right eye acute irido-choroiditis set in. Only a slight improvement followed the enucleation of the stump of the left eye. A *vertical incision* was then made through the cornea midway between the external pupillary margin and the limbus of sclera. Decided

improvement in seven days after the operation. Hyperæmia diminished, and the rather discolored iris cleared up. In the next two months, increased redness and photophobia recurred, but no iritis. Vision had so far improved as to be able to count fingers twelve inches off.

Solomon treated also a case of *pannus* of the cornea by free *incision* of that membrane. The sclera and the margin of the cornea were equally red, but the central part of the cornea was yellowish white, infiltrated and swollen. A vertical incision was made through the entire cornea with a Græfe knife. After four weeks the wound healed. Cornea and pupil clear.

DHANENS (*Ann. de la Soc. de Med. Anvers.*) reports three cases of very rebellious pannus, which resisted all the usual remedies in vogue, but yielded at last to the *inoculation* of *gonorrhœal matter.*

CRITCHET (*Med. Examiner*) *inoculated* the *product* of *acute blenorrhœa* in a case of a thick trachomatous pannus, with success. After three months the details of the iris were made out; could read Jæger No. 96.

MORTON (*Ophthalmic Hos. Rep.*,) mentions also two cases of pannus treated successfully by *inoculation with blenorrhoic pus.* One patient was treated by Bowman; he could not count his fingers on account of pannus; periotomy effected no improvement. The right eye was sound and protected by a bandage during the blennorrhœa. In six months he could read Jæger No. 4 at eight inches. The other patient had pannus on both eyes. Critchet *inoculated* the *secretion* of *blennorrhœa neonatorum.* One month later counted fingers at 14 feet with left eye, and 6 feet with right eye. In 4 months read Jæger No. 1 with left eye, and No. 4 with right eye.

[In this connection, I will add a typical case of *pannus trachomatosus* of *both eyes*, of two years standing, which came under my care in 1876, which was also successfully treated with *inoculation* of *gonorrhœal matter.* A woman aged 27, an attendant in a notion store, an embroiderer by trade, consulted me in June, 1876. She was totally blind, had hardly a perception of light; she had sat in a dark room for nearly two years; had to be led to the table and to bed; I found her suffering from a pannus trachomatosus of both eyes; the network of blood-vessels on the cornea was so dense that not a trace of the cornea was

visible; the lids were very much infiltrated, difficult of eversion and very trachomatous; she was very feeble, a wreck, both physically and mentally; she had been under treatment from the beginning, and the usual routine remedies applied. I saw no prospect of benefitting her by canthoplasty, periotomy, astringents, sulphate of copper, etc. I concluded to try inoculation as a *dernier ressort*. I took her to the St. Louis Hospital and consulted the medical and surgical staff. They all agreed that her case was almost hopeless, and the plan of inoculation of gonorrhœal matter perfectly justifiable. I explained to the patient and to her friends the gravity, severity and the uncertainty of the experiment; they had to assume the responsibility in case of failure; they not only agreed but were very anxious for it. After a long search I found a man with gonorrhœa of three days standing. I saturated some lint with gonorrhoic matter and placed it between and under her lids for about five minutes. I enjoined a perfectly passive proceeding and absolute rest on her. The next day or two gonorrhœal ophthalmia was manifest; the lids swelled up enormously, the secretion was abundant, pains great; she bore it all patiently; the inflammatory process was not interfered with in any manner or form; only the pus was wiped off the cheeks to prevent corrosion. In about two weeks the violence of the inflammation began to subside, and in three weeks the great change in the appearance of the corneas was unmistakable; they cleared up quicker than could have been anticipated; the pupils were visible at the end of the fourth week. In six weeks she counted fingers, and in ten weeks read Schnellen No. 16. Though the pannus and trachoma had left both eyes, yet only one became practically useful. The cornea of the other was very conical. Whether this keratoconus existed prior to the pannus or had developed during the panniform keratitis, I am not able to say. The patient has assumed her avocation of embroidery, reads her prayer book and enjoys good health. She has been seen frequently after leaving the hospital; her recovery seems to be permanent.—S. P.]

Translations from the French.

NEW MODES OF SURGICAL TREATMENT. ("Histoire de la Chirurgie Française" par le Docteur JULES ROCHARD. Edit. 1875. pp. 635, *et seq.*) Translated for THE JOURNAL by B. A. WATSON, M. D., Surgeon to Jersey City Charity, and St. Francis' Hospitals, Jersey City, New Jersey.

If surgery, regarded as a science, comes in contact with the most important questions of pathology and therapeutics, the surgical art properly so-called, is composed of details which the ancients better understood than we. Louis found that the surgeons of his time neglected too much the dressings and bandages, and that in perfecting the art they had forgotten the trade. The illustrious Secretary of the Academy of Surgery, if he were to pass to-day through our surgical wards, perchance would find that we are beginning to forget the art itself.

Great efforts have been made without doubt during the last twenty-five years to perfect this branch of surgery, which Lombard and Lecat considered as the most important of all; but the mental influences which have controlled the minds of the cotemporaries have served in a remarkable degree to turn them away from those subjects which directed the action our fathers. Theirs were especially artistic ones, exclusively useful. They applied the dressings with studied elegance, a sort of coquetry, which today seems to us puerile. Mathias Mayor struck the first blow at the classic bandaging of the school of Desault, and the indifference of those who followed has done the rest. The complicated and accurately applied bandages are employed now only in cases of minor surgery; this is a sacrifice made to tradition, an exercise for students; now no one attaches to it much importance, some even pretend not to occupy themselves with it. This indifference is regretable; the care that the surgeon takes in the application of a bandage is a relief to the patient and a homage rendered to the dignity of the art. It is proper to admit, however, that the choice of topical applications is a subject of more

importance, and it is on this side that the attention of the surgeon is most particularly fixed in these latter days. This question became one of real interest when the prevention of purulent infection began to occupy the professional mind; but to render an account of the reformation which resulted from this we must return to things of the highest importance.

1st. TREATMENT WITH WATER.—Following the reaction which had manifested itself towards the end of the eighteenth century under the influence of the work of Hunter, the surgeon had gradually given up the use of ointments, balsams and plasters, for the purpose of adhering to humectives and greasy bodies. Pibrac and Louis had, on the other hand, abandoned the use sutures, and the local treatment of wounds was gradually almost reduced to agglutinative bands whenever primary unions were aimed at, and the use of cerates and cataplasms when it was no longer possible to avoid suppuration. In despite of some attempts at reform[2] this state of things has lasted more than half a century. The treatment with water, therefore, as I have shown in the first part of this work[3] has not been able to acclimate itself in France, notwithstanding the examples and precepts of the military surgeons; but by a foreigner their teachings have been turned to profit. At Vienna, since the time when V. Kern denounced the use of charpie and ointments, and substituted for them simple[4] compresses soaked in luke-warm water, this authority has not ceased to be followed. In 1827, Walther, who had introduced it at the University of Bonn, claimed the priority, and defended this claim against Kern in a lively debate in the German journals. A pupil of the latter, Dr. Fritz, had likewise popularized this mode of treatment in the hospital of Prague. At Berlin, Langenbeck, in 1839, had praised the permanent warm water bath in the treatment of large wounds which was first suggested by Lamorier.[5] He flattered himself

2. Jules Guyot, *De la chaleur dans le traitement des ulceres, des plaies, après les amputations et les grandes operations chirurgicales.* Paris, 1842, in 8° avec quatre planches lithographiees representant les apparells.

3. Première période, chapitre iii, article 3, p. 72.

4. Vinc. Kern, *Avis aux chirurgiens pour les enguger à accepter et à introduire une methode plus simple, plus naturelle et moins dispendieuse, dans c traitement des plaies.* Vienne, 1809; Nouvelle ed. 1825.

5. Langenbeck plaçait les parties blessées dans de grandes boites imaginées par Fock, un de ses élèves, et qu'il remplissait d'eau á 28° ou á 30°

by this means as being able to diminish pain and tension, to prevent pyohæmia, and to hasten cicatrization. His therapeutic innovation had much success in Germany.

Drs. Ulrich Wilms, (of Berlin), Wagner (of Dantzig), Zeis (of Dresden), adopted it, and during the Schleswig-Holstein war Langenbeck and Stromeyer had recourse to it with advantage in the treatment of gunshot injuries.

In 1855 Valette (of Lyons) had also employed prolonged immersion in the treatment of large wounds.[6] Similar trials were made in the hospitals of Paris during the following year; at Cochin by Gosselin, at the Hotel-Dieu by Laugier. The results were quite favorable; nevertheless they relinquished too soon this treatment, because of the difficulty of its application. It required watching every moment, and the constriction necessary to maintain the dressing on the injured limb was not easily borne, as LeBert has observed. In England, Ireland and Scotland the treatment with water took the place of all other systems, thanks to the efforts of Lister and Macartney.

Lister employed this method at the Royal Hospital, at Edinburg,[7] a long time, when in 1835 he imported it into the University Hospital, at London, which had just been erected. In 1836, Macartney addressed to the Academy of Medicine, a memoir, in which he insisted on the advantage of repose, position and cold water in the treatment of wounds of every nature. His confidence in the union of these means was such that he flattered himself, by their well directed employment, to be able to cure without pain, suppuration, or fever, penetrating wounds of the articulations, gunshot wounds with comminuted fractures of bone, and equally well other accidents of this degree of sever-

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Réaumur. Voyez P. Picard, *Application du bain local, chaud et permanent au traitement des plaies résultant de lésions traumatiques on d'operations chirurgicales.* (Clinique de M. Langenbeck, à Berlin,) in *Gazette hebdomadaire* 1855, p. 872 et 1856, p. 184.

6. Pupier, *D'un traitement consécutif spécial des amputations, comme, moyen d'obvier aux accidents des grandes plaies*, thèse de Paris, 1855, et Valette, chirurgien en chef de la Charité de Lyon, *Sur une Nouvelle methode de pansement des grandes plaies.* (*Methode an aéro-plastique, in Gazette hebdomadairé,* 1856, p. 37.)

7. Thomas Morton, *Quelques remarques sur le Pansement des plaies et des ulcères a l'hôpital de l'université de Londres.* (*Gazette Médicale* de Paris 1838, t. vi. p. 536.)

ity.[8] Despite the authority of these two names the water dressings have had some trouble in taking root in the hospitals of the United Kingdom, and in the third edition of his operative surgery, published in 1840, Lister still raised his protest in all the power of the English language against the routine errors, against the use of balsams, ointments, pledgets, compresses and bandages, against daily washings performed with sponges of doubtful cleanliness, which he styled *dirty, abominable* practice, *revolting to nature and common sense.* Lister remained faithful to his principle until the end of his life; they finished by gaining their cause, and to-day the water dressings in the London hospitals are the rule, as Paul Topinard was able to authenticate in the journey made to England in 1860, and of which he published an account on his return.[9] It is there employed at the ordinary temperature, a little heated in winter, pure or with the addition of some aromatic substance. They soak in itpieces of lint, a kind of linen or hempen fabric, the downy surface is then applied to the wound. The whole is enveloped in an impermeable covering which differs in the various hospitals; they sometimes employ court-plaster, varnished paper sometimes, or sheets of gutta-percha; the hackneyed sponges are completely banished. Let us add that this treatment is powerfully aided at the same time with hygienic care of which we shall speak more hereafter. This method has likewise been adopted in Germany, as Bonnafont has had occasion to authenticate. At Vienna, Berlin and Munich he has seen wounds after major as well as minor operations, covered with linen soaked in water at the temperature of the wound.[10]

This mode of treatment is still in use in the hospitals of Vienna.[11]

In France it has been limited to several trials. In the month of October, 1849, R. Marjolin communicated to the surgical society very satisfactory results which he had obtained by the em-

8. James Macartney Professeur d'anatomie de chirurgie a la université de Dublin, *Observation sur la guérison des plaies dans inflammation.* (*Memoires de l' Academie de Medicine*, 1836, *t* v, p. 64.

9. Paul Topinard, *Quelques aperçus sur la chirurgie anglaise.* Thèse de Paris, 1860, in—4°, 132 pages.

10. Voyez la discussion académique sur la salubrité des hôpitaux. Séance du 10 decembre, 1861. (*Bulletin de l'Academie de Medicine*, t. xxvii, p. 2085.)

11. *Barthélemy, l'Exposition universelle et la faculté de Médicine de Vienne.* (*Archives de Medicine Navales* 1874, t. xxi, p. 219.)

ployment of cold water in the treatment of ulcers.[12] This communication made only a slight impression—no person appeared to be convinced—nevertheless the application of cold water, aided by the horizontal position, constitutes the best means of treatment with which we can combat varicose ulcers, as has been fully demonstrated many years since. Under this influence the eczematous redness which surrounds these large ulcers disappears, the exuberant granulations take on a healthy aspect, and the cicatrization, aided by some cauterization with the nitrate of silver, follows with sufficient promptness. When the ulcer is healed an elastic stocking will prevent a relapse. At the time this discussion took place, the attention of the profession had not been directed to these facts, but when the work of Topinard made its appearance they had commenced to occupy themselves seriously with them. However, it only had the effect of giving to the water treatment a momentary reputation; they continued to experiment with other methods. It was only ten years later that Leon LeFort[13] again called attention to this method. His simple treatment by continued bathing, only differed from that of the English, by the substitution of compresses for the lint, and by the addition of one-tenth part of alcohol to the water in which he soaked them; but he is entitled to the merit of obtaining the advantages of a uniform temperature, with a constant humidity, which is maintained by an impermeable envelope, and of the insulation of the injured parts, which it affords by protecting them from contact with the air. Nevertheless this mode of treatment, so very natural and economical, has not been able to be generalized in France, although it especially favors the hygienic condition of the hospitals in our large cities. The English, more favored than we, do not see purulent infection continually suspended over the heads of their patients, and it is this menace which has for all time occupied the minds of Parisian surgeons.

The water dressings have not appeared to offer a sufficient guarantee against it; there was need of more reliable preservations, or those which appeared at least to be such, and at the

12. R. Marjolin, *Traitement des ulcères par l'eau froide.* (*Bulletin de la Societe de Chirurgie*, t. -er, p. 378.

13. Léon LeFort, *Pansement simple par le bain continué*, Memoire lu à l'Académie de médicine le 31, mai, 1870, *Bulletin de l'Académie*, t. xxxv, p. 539.

epoch to which we refer, they devoted themselves to this investigation with an ardor and fertility of imagination most praiseworthy. It was under this influence that were born the greater part of these methods that we are about to review. Although they are somewhat numerous, they group themselves without effort about two principal indications.

The one class has for its object the neutralizing of some active toxic principles; the other the protection of the wound from contact with them. We designate the first under the general name of antiseptic dressing; the other under the name of treatment by occlusion.

[TO BE CONTINUED.]

Clinical Reports from Private Practice.

A CASE OF OPIUM POISONING. By Geo. W. COREY, M. D., of Cheyenne, Wyoming Ter.

On the afternoon of February 10, 1879, I was called in great haste to see Mrs. H., a married lady, 24 years old, who had taken a poisonous dose of laudanum, evidently with suicidal intent. About 19 o,clock that forenoon, while under great mental excitement caused by the outrageous conduct of a drunken brutal husband, she swallowed two ounces of tincture of opium. For the first hour and a half after taking the drug she labored under great excitement and intoxication, talked rapidly and incoherently, and finally told her sister, at whose house she was sojourning, what she had done. Her brother-in-law, a very intelligent man, who was at his business a short distance from the house, was summoned at once and gave her copions draughts of salt and water, which produced free vomiting; and as she now began to be stupid and listless, he kept her moving about the house. This proceeding was continued for an hour and a half, or until 1 o'clock, and as the fumes of laudanum were very strong in the matter ejected from the stomach she was thought to be out of danger and allowed to lie down, and the brother-in-law went to his business. She was left alone until half past two o'clock when her sister, who had been in another part of the house, discovered that she was sleeping profoundly, breathing very slowly

with a gurgling noise in her throat and could not be aroused. The brother-in-law was again summoned and directed constant rubbing of the extremities, while he did his best to induce respiration artificially. The rubbing of the limbs and the efforts at artificial respiration were vigorously kept up until my arrival at 10 minutes before 4 o'clock. I saw at a glance that the patient was in a most critical condition, and at once injected hypodermically fifteen minims of the tincture of belladonna. On careful examination I found the pulse about 120 per minute, rythmical though feeble; the respiration little more than gasping, 8 to 10 times per minute; the surface of the skin and nails were a deep purple, the pupils of the eyes contracted to the smallest size, and the temperature in the axilla 90°. Bottles of hot water were placed in the bed around the patient, and friction over the extremities kept up, while I directed my attention as much as possible to keeping up respiration artificially by the ready method of Marshall Hall. During the first fifteen minutes after the injection of the belladonna no perceptible change occurred, and another hypodermic injection of 30 minims of the tincture was then given. For fifteen minutes longer the friction and artificial respiration were continued, but no change for the better had occured in the breathing, nor had the pupils of the eyes enlarged perceptibly. I accordingly injected 15 minims more of the belladonna, and noticed that the natural efforts at respiration, which had been failing all the time since my arrival, were now almost entirely gone. I had no instrument at hand by which I could make use of electricity, and there was certainly no time to be lost. A handkerchief was placed over the patient's face, the head thrown back so as to straighten the neck; the nose was firmly grasped, and the mouth held open; then filling my lungs to their utmost capacity, I placed my mouth over that of my patient and forced the air into her lungs with all the strength I could muster.

This process was repeated about ten times a minute, for twenty minutes, at the end of which time, to my utter astonishment, my patient kept up natural breathing twelve to fifteen times per minute. The pupils of the eyes were soon fully dilated, the purple hue of the nails and skin disappeared, the pulse became full and less frequent, and the temperature soon rose to the normal standard and up to 102°, and at six o'clock consciousness had so far returned that she recognized her friends. She remained wakeful, the throat dry, stiff and sore, the voice husky, and the stomach very irritable during the next fifteen hours. All these sequels of opium poisoning, however, passed away without any unusual occurrence. I have thought it proper to report this case, first, because I was able to get a more correct and reliable history of it than one is usually able to get; secondly, as a case that shows how perfectly belladonna will antagonize opium in the human system; thirdly, it gives an important hint as to the best method of administering belladonna in cases of

opium poisoning, viz: in small and frequently repeated doses hypodermically—watching its effects upon the pupil of the eye and the respiration, until these give evidence that the drug has been pushed sufficiently. I should, however, under similar circumstances, give the thirty minim dose first, and repeat the fifteen minim doses at intervals of fifteen or twenty minutes, until the desired effect was produced.

ANOTHER MITE OF A CHILD. By Dr. ELIZABETH TOWNSEND, of St. Louis, Mo.

Seeing in the February No. of the ST. LOUIS MEDICAL AND SURGICAL JOURNAL, Dr. T. A. Winn's brief history of an "unusually small child," I will give a short account of one in my practice in 1873. I was called at 11 A. M. to Mrs. M———; seventh month; pregnant with eighth child. I found her with expulsive labor pains, and in less than one hour a female child was born, which weighed (minus the wrappings) *two pounds*. It seemed very lively.

The day previous she had carried a patent bucketfull of ripe currants from a friend's house, some blocks (up grade) from her own house, and felt tired at the time.

I enjoined for the child perfect quiet, a strictly even temperature, and not to be disturbed only when necessary, which orders were carefully carried out for a few days, nursing nicely. Their vigilance began to relax. As it was such a novelty it was uncovered to the gaze of any one whom curiosity took to the house. More than this it was carried to the open door, and from room to room, catching draughts of air. It began to grow feeble, would not nurse and gradually declined. At the end of two months it died, looking exactly like a little wax figure.

THE INFUSION OF BUCKEYE AS A REMEDY FOR CHRONIC RHEUMATISM. By W. S. DRAKE, M. D., of Fair Play, Mo.

I had an inveterate case of chronic rheumatism cured by the patient bathing in an infusion of buckeye (*Æsculus Hippocastanum*). He had not walked for nearly two years, and had gone through the whole routine of rheumatic remedies. While treating a horse with the infusion of buckeye, he found the swelling to rapidly disappear from his hands. He then applied it to other joints, and received the same benefit. I hope the profession will give it a thorough test.

Proceedings of Medical Societies.

AUDRAIN COUNTY MEDICAL SOCIETY.

The Audrain County Medical Society met Feb. 28th at the usual hour in Dr. French's office. The minutes of last meeting were read and approved. A motion carried, making it the duty of the Secretary (instead of the President,) to notify all members of the society of the time of our regular meetings, one week in advance of each. Dr. W. W. Rodman was nominated for membership, and declared by the secretary elected unanimously. The Executive Committee appointed Dr. Macfarlane essayist for our next meeting, assigning him the subject of "Acute Inflammatory Rheumatism."

Owing to the absence of Dr. Humphreys, who had been appointed to read a paper this evening, on the subject of acute pneumonia, by request, Dr. Macfarlane favored the society with a short and very interesting account of his recent visit to the St. Louis schools of medicine. He spoke in the highest terms of the kind treatment bestowed upon him by the members of the faculty, and also by the editor of the ST. LOUIS MEDICAL AND SURGICAL JOURNAL. He described in full as he saw it performed, an operation for recto-vaginal fistula, also the treatment of endo metritis by iodine injections. He mentioned also a case of retroversion of the uterus, which was replaced in one minute's time, and held in position by the use of Hodge's pessary. The Doctor gave a detailed description of an interesting surgical operation performed by Dr. Hodgen. He stated that sulphuric ether was the anæsthetic agent used in all the cases that he witnessed; did not see chloroform administered in any instance.

Dr. Keeton spoke in very decided terms of opposition to the custom practiced by the society, of continuing the essayist from time to time, who, from neglect, fails to have his paper ready and before the meeting at the proper time. His remarks on this subject seemed to express the views of all the members present. It was suggested by the Secretary, that hereafter, to prevent disappointment by the necessary absence of the essayist, his paper may be placed in the hands of any member of the society, who shall cause it to be read at the proper time. The suggestion met with approval from all.

By resolution, article first of the by-laws was changed to read "four members" shall constitute a quorum for the transaction of business, instead of "seven," as heretofore.

An interesting paper was then read before the society by Dr. French (which will appear in the May number).

After some discussion, the society adjourned to meet on the 4th Friday in March. A. M. PATTERSON, Sec'y.

ST. CLAIR COUNTY MEDICAL SOCIETY.

The St. Clair Co. (Ills.) Medical Society met in E. St. Louis, on the 6th ult., President Dr. L. Bremer in the chair. There being but one session not much time was given to scientific discussion. The subject of diphtheria, however, was taken up and remarked upon by Drs. Bremer, Moore, Sisson, Bechtold, Rubach and others.

Amongst the routine business, the following preamble and resolutions, touching the relations of doctors to newspapers, were offered by Dr. Fairbrother and unanimously adopted:

WHEREAS, we regard the public press as a very valuable aid to the progress of medical science, and as standing intimately related to the best interests of the medical profession, and

WHEREAS, this is the avenue by which, very often, great notoriety and emolument are obtained by impostors who are not members of the profession, but who assume the name only to disgrace and dishonor it, who take charge of cases of which they are utterly ignorant, and insure cures where not even relief is possible, and

WHEREAS, this means of public notice is a grave temptation to many members of the profession, and

WHEREAS, those who obtain the most notice of this kind are, as a rule, the least worthy of notice of any kind; therefore be it

Resolved, (1) That we extend our hearty thanks to the press of this vicinity for their support and co-operation, in the advancement of the medical profession, and especially in the matter of the law lately gone into effect which has for its object the improvement of the medical practice of the State.

Resolved, (2) That we politely invite the managers of the various newspapers in this vicinity to refrain from publishing the names of the physician or surgeon in attendance in items of accident or sickness, unless such publication relates to the interest or sense of the item.

Resolved, (3) That it is unprofessional for the name of a physican or surgeon to appear in the public prints in connection with any remarkable exihibition of his skill.

Resolved, (4) That the less frequently the names of medical men appear in the newspapers the better it is for the dignity of the profession.

MACOUPIN COUNTY SOCIETY FOR MEDICAL IMPROVEMENT.

The first regular quarterly meeting for 1879, of the Society of Macoupin County for Medical Improvement, was held in Carlinville, Jan. 21st. Meeting called to order by the President, Dr. A. B. Penniman, at 11:30 A. M. Twenty members present.

On account of the temporary absence of the Secretary and Assistant Secretary, Dr. Brother was appointed Secretary *pro tem.* Reading minutes of last meeting postponed till afternoon session. Dr. Wm. Day proposed Dr. J. M. Day, of Palmyra, for membership. Proposition referred to Board of Censors.

In accordance with Dr. Brother's motion to that effect, made at the last meeting, the discussion of Dr. Crawford's paper on "Dysentery," was next in order. All the gentlemen present agreed in heartily commending the paper, but differed to some extent with the writer, and with each other in regard to the treatment.

Dr. Clement gave a saline cathartic, and followed it by full doses of choral hydrate.

Dr. Brother gave a hypodermic injection of morphia to relieve the pain, tormina and tenesmus; gave also ice cold water injection per ano; had obtained excellent results with this treatment. In chronic cases he had met with good success by the use of nitrate of silver injections.

Dr. Seaman gave opium in pills, the older and harder the better; the cold water enemas had never succeeded well with him. In chronic cases he relied upon a good substantial diet and tonics.

Dr. Lane was opposed to the use of calomel in dysentery. He put his chief reliance in opium in some one of its forms.

Dr. J. P. Mathews thought that if calomel accomplished any good in this disease it was by relieving the portal congestion. In the treatment of dysentery he used large doses of opium, but preferred some other preparation to that of morphia.

Dr. Ash was opposed to the use of mercury in any form; he had no faith in the cold water injections, but regarded opium as the sheet anchor in the treatment of this disease.

Dr. Holliday had met with good success in the treatment of this disease by using blue mass, rhubarb and opium. After some further discussion the Society adjourned till 2 o'clock P. M.

AFTERNOON SESSION.

Meeting called to order by the President, at 2:15 P. M. Members present, twenty.

Minutes of last meeting read and accepted.

Dr. A. C. Corr proposed for membership, Dr. F. T. Corgan. Referred to Board of Censors.

Committee on Programme reported as follows: Next place of meeting at Brighton.

Essayists.—Dr. Mitchell, Typhoid Fever; Dr. J. R. Lane, Use of Obstetrical Instruments; Dr. H. T. James, Septicæmia. On motion the report was accepted.

The Board of Censors reported favorably in regard to Drs. James M. Day and F. Corgan, and recommended them for membership in this Society. Moved and carried that the report be accepted, and that we proceed to ballot for Drs. Day and Corgan. These gentlemen were then duly elected members of the Society.

The special committee on the interpretation of Sec. I, Art. 4, of the American Code of Medical Ethics reported as follows:

Gentlemen of Missouri: Your committee appointed to report the interpretation to this Society of Sec. I, Art. 4, of the code of medical ethics, would respectfully submit the following: While the ethics in many places show an ambiguity of expression, as if words were intended to conceal rather than convey ideas, an examination of Sec. I, Art. 4, reveals language so plain that in the opinion of your committee, only one construction can possibly be placed upon it, which is that no consultation shall be had with any other person preaching a dogma, not with a physician not in good moral and professional standing.

The American Medical Association, at its session of 1869, went a step a farther, and by resolution decreed that regular graduates of medicine practicing irregularly were excluded from professional recognition. The question then hinges on what constitutes a consultation or professional recognition. After looking the ground over carefully, your committee feel that instead of this construction being left to individual feelings or desires, an authoritative interpretation by this body for the government and control of its members will be the cause of the greatest and most permanent good; they therefore would recommend your body to adopt the following for the government of this Society, and the control of its members:

Resolved, Accepting an invitation from or extending an invitation to any person practicing medicine to see a patient or accepting a call, and prescribing or making suggestions for a patient while in, or to be continued in, the charge of any person called a physician, must be construed as a consultation.

FRED. BROTHER,
A. C. CORR,
M. W. SEAMAN,
F. A. CLEMENT. } Committee.

Dr. J. P. Mathews moved to amend the above by substituting the following:

WHEREAS, In the language of the code, medicine is a liberal

profession in which all who enter its ranks should act liberally, not only with each other, but with all mankind; therefore, be it

Resolved, 1st, That it is the opinion of this Society that the act of consultation is sufficiently interpreted and the consulting physician's conduct sufficiently directed in Art. IV, Sec. 20, of the Code of Medical Ethics, where it reads "a physician who is called upon to consult should observe the most honorable and scrupulous regard for the character and standing of the practitioner; and further, be it

Resolved, That any conduct on the part of a regular physician meeting an irregular practitioner falling short of said part of said section, can not be construed by this Society as consultation."

After some farther earnest discussion, the motion to amend by the adoption of the substitute was lost.

On motion, the original report of the committee was adopted by a vote of eight to ten.

The Society then listened to an interesting paper on "Scarlet Fever," by Dr. Gross, of Gillespie.

On motion the paper was received and submitted to the Society for discussion. The debate which ensued was participated in by nearly all present.

The hour being quite late the Society adjourned to meet in Brighton, the third Thursday in April.

G. E. BUCKNELL, Sec'y.

SOUTHEAST KANSAS MEDICAL SOCIETY.

According to an adjournment of the primary meeting of physicians of Southeast Kansas, held at Girard, on the 7th day of February, 1879, and after due notice having been given by the Society as instructed, the following named physicians met at the Council Room in the city of Fort Scott, Kansas, April 1st, 1879: Drs. R. J. Peare and C. P. Lee, of Louis County; Drs. J. H. Conch, S. S. Sanger, F. F. Dickman, B. F. Hepler, R. Aikman and G. R. Baldwin, of Bourbon County; Drs. W. W. Watkins, R. B. King, J. H. Cusherbery, Wm. H. Warner, G. W. Scholl, J. W. Wallace, T. Barnett, C. E. Taylor and Allen Wilson, of Crawford County; and Dr. J. K. Barney of Cherokee County.

Dr. W. W. Watkins, temporary Chairman, called the meeting to order. Minutes of the primary meeting were read and approved.

The Committee on Incorporation reported favoring the form-

mation of an auxiliary to the State Medical Society, as provided under their constitution and by-laws, and recommended that the claims of this Society be presented to the State Medical Society at its next annual meeting for its action, by the officers which shall be elected at their meeting, and that they report at the next meeting of this Society.

On motion the report was received and adopted and the committee discharged.

The Committee on Constitution and By-Laws reported favoring the adoption of the constitution and by-laws of the State Medical Society with such changes as may be necessary, in order to make them applicable to a district medical society. After reading as so changed, adopting the name "Southeastern Kansas Medical Society," it was moved and seconded that the report be received and the constitution and by-laws be adopted for the government of this society, and the committee be discharged. Carried unanimously.

It was moved and seconded that the Chairman appoint a committee of five to nominate gentlemen for the various offices for the ensuing year. Carried

The Chairman appointed Drs. Hepler, King, Peare, Barney and Cushenbery.

The committee reported as follows:

President—Dr. G. R. Baldwin, Fort Scott, Kansas.

Vice-President—Dr. W. W. Watkins, New Pittsburgh, Kansas.

Secretary—F. F. Dickman, Fort Scott, Kansas.

Treasurer—R. J. Peare, Pleasanton, Kansas.

Members Board of Censors—Drs. B. F. Hepler, J. H. Cushenbery and R. Aikman.

Committee on Surgery—Drs. Wm. H. Warner, R. B. King, and J. K. Barney.

Committee on Practical Medicine—Drs. J. R. Peare, C. P. Lee and S. S. Sanger.

Committee on Obstetrics—Drs. G. W. Scholl, J. H. Conch and T. Barnett.

Committee on Materia Medica—Drs. R. B. King, J. H. Cushenbery and W. W. Watkins.

On motion the report was received and the committee discharged.

On motion the rules were suspended and a permanent organization effected by the election of officers as named in the report, by acclamation.

The President elect took the chair.

It was moved by Dr. Watkins and seconded by Dr. Hepler that the next meeting be held on the second Tuesday in July, being July 12th, 1879, in the city of Fort Scott.

It was moved and seconded that the initiation fee be one dollar and the annual dues one dollar, payable quarterly. Carried.

The Secretary was requested to furnish a copy of the minutes to the ST. LOUIS MEDICAL AND SURGICAL JOURNAL for publication.

G. R. BALDWIN, President.

F. F. DICKMAN, Secretary.

ARKANSAS MEDICAL COLLEGE.

At a regular meeting of the "Little Rock and Pulaski County Medical Society," held at their rooms April 5, 1879, the following faculty was elected to put into operation "The Arkansas Medical College," under the charter granted said school of medicine in the year 1874:

William Thompson, M. D., Professor of Principles and Practice of Medicine and Dean of Faculty.

James A. Dibrell, Jr., M. D., Professor of Principles and Practice of Surgery and Clinical Surgery.

D. H. Dungan, M. D., Professor of Materia Medica and Therapeutics.

Edward Cross, M. D., Professor of Obstetrics and Gynæcology.

A. H. Scott, M. D., Professor of Anatomy and Ophthalmology.

J. H. Southall, M. D., Professor of Nervous Diseases and Medical Jurisprudence.

Claiborne Watkins, M. D., Professor of Chemistry and Pharmacy.

J. M. Pirtle, M. D., Professor of Clinical Medicine and Diseases of Children.

J. J. Jones, M. D., Professor of Physiology and Secretary of Faculty.

John R. Colburn, M. D., Demonstrator of Anatomy.

Periscope of Current Medical and Scientific Literature.

THERAPEUTICS.

PRODUCTON OF OPIUM IN CHINA.—A series of reports on the opium trade in China have been recently gathered together from the various British consuls residing in the Celestial empire. Though opium cultivation is ostensibly prohibited in China, it is, nevertheless, not only carried out on a large scale, but is increasing rapidly, the cultivation being much more profitable than that of wheat and other food crops. Thus it is asserted that if the Chinese government were really and sincerely desirous to stop its growth it would be quite unable to do so. From Newchwang the reporter says: "Though the growth of the poppy is prohibited by the imperial government, this prohibition is regarded as a dead letter in many districts, and the cultivation is encouraged by the local authorities, as the inland dues levied on native opium, though lighter than those on the imported drug, are much heavier than on any other description of native produce, and their receipts proportionally greater." The chief opium producing provinces are Yunnan, Kweichow, Szechuen, Shansi, and also Eastern Mongolia and Manchuria. In all these provinces poppy cultivation has made rapid progress, and in some parts the opium has improved in quality. In the opium producing districts the smokers are estimated at five-tenths of the native male population, and the proportion throughout China is computed at three-tenths of the native male population. The consumers of native Chinese opium consider it to be less deleterious in its effect than the foreign produce. It is stated, however, that some authorities hold a contrary opinion. An authority of some importance gives it is a fact that a much larger quantity of native than foreign opium is required to produce a like state of stupor; and in the case of the Manchurian produce, in addition to this inferiority of quality the effects of indulgence in it use are more deleterious. The native opium is said to be coarser and more fiery and the flavor inferior to the Indian.

Regarding its capabilities for smoking, Mr. Adkins, reporting from Newchwang, says: "There can be no doubt that the residue, after smoking the native drug, is much more available for again passing through the pipe than the residue of the foreign drug. It is said, indeed, that good native drug can be passed four our five times through the pipe. Against this must be set the fact that the foreign drug is more satisfying than the native.

A pipe of native opium at 6 A. M. will require a second at 10 A. M., whereas the craving would not return after the foreign drug sooner than noon." In the northern provinces, Shansi, Shensi, and Kansuh, poppy cultivation requires very great care on the part of the grower, together with the richest possible soil. It is grown with the utmost success on the terrace slope or the most fertile bottom land, which allows of thorough irrigation, and which would be devoted to the cultivation of wheat and vegetables were it not for the very large profits derived from the prepared opium. In the provinces just referred to "there is a limit beyond which the the poppy cannot be raised with remuneration to the grower, and the production is never likely to be much in excess of the demand for consumption. In the southern and central provinces, on the other hand, the poppy cultivation does not interfere to any considerable extent with that of grain, especially in Szechuen, where the difficulties of transport in supplying a deficiency in the local crops from the neighboring provinces render necessary the retention of large tracts of land for the raising of grain. The soil here is so rich and fertile that the most suitable ground for poppy is the terraced hillsides, where the effects of the heavy rains frequent at certain seasons of the year and which would render the low lying fields too damp, are, comparatively speaking, unfelt. Sown during November the poppy blossoms early in April, and comes to maturity within a month, thus leaving the fields free for a summer crop. Before the poppy has seeded, an intermediate crop of maize, wheat, cotton, or tobacco is grown, the poppy stalks being cleared away in time to prevent interference with the young shoots." The opium yield is very uncertain, being much affected by the state of the weather during the growth of the plant. Thus bad weather may ruin a whole year's crop, but on the contrary one good season may recoup the losses of several bad ones.

In Shantung, it appears that native grown opium is seldom or never used alone, owing to its hot and unpleasant flavor. It is usually mixed with an equal quantity of Indian opium. The increasing consumption of opium here is stated to be clearly caused by its cheapness, added to the belief that it is less injurious in its effects than the Indian drug. Though Bengal opium is chiefly used in the Suchow and Changehow prefectures, the native opium is largely used for mixing purposes, and in the districts north of Yantze, where Malwa is chiefly consumed, the native product, although smokers of Malwa are said to take to it less easily than smokers of Bengal opium, has already affected the consumption of the foreign article. The Indian product is almost exclusively used in Shangai.—*Pharm. Jour. London.—The Druggists Circular.*

PIMENTO AS A REVULSIVE.—To the list of revulsives and local irritants, M. Lardy adds the extract of pimento. The color of

the extract, like that of the fruit, is a beautiful red. By being incorporated with a plaster, it may be spread upon cloth or paper, and adheres to the surface of the skin without warming. It acts rapidly, ten to twenty minutes being the usual limit, according to the point of application and sensitiveness of the skin. From the outset it causes heat, redness and slight smarting. These phenomena increase in degree for about three hours, and then remain stationary. Neither the heat nor smarting are painful, and do not hinder the patient continuing his occupation. There is no itching, and the effect remains localized. Compared with mustard, it is of about half the strength of the latter.—*Canada Med. Rec.*

EXTRACT OF PIMENTO AS A REVULSIVE. (dr. ed. couturier.)—In cases where the persistent and blistering properties of cantharides would produce too great an effect, and where the ordinary rubefacients, as tartar emetic, croton oil and thapsia, are not active enough, the extract of pimento may be used, which produces intense rubefaction within ten to thirty minutes. Particular care must be taken to clean the hands after handling it, so as not to get any into the eyes, nose, or mouth.—*Ibid.*

THE EUCALYPTUS IN ALGERIA.—Consul-Gen. Playfair writes: Formerly it was impossible for the workmen at the great iron mines of Mokta-el-Hadid to remain there during the summer; those who attempted to do so died, and the company was obliged to take the laborers to and from the mines every morning and evening, 33 kilos each way. From 1868 to 1870 the company planted more than 100,000 Eucalyptus trees, and now the workmen are able to live all the year through at the scene of their labors.—*Canada Med. Rec.*

ANTIDOTE TO CARBOLIC ACID.—The Pharmaceutische Zeitung für Russland says that on the recommendation of Professor Baumann, Dr. Sanftleben has used sulphuric acid in several cases of poisoning by carbolic acid with the best success, the phenol combining with the acid to form phenyl-sulphuric acid, which is not poisonous. He administered it in a mixture composed of diluted sulphuric acid 10.0, mucilage of gum, 200.0, and a simple syrup 30.0 grams, in doses of a tablespoonful every hour.—. *Louisville Med. News.* (*New Orleans Med. and Sur. Jour.*)

TREATMENT OF OBSTINATE HICCOUGH BY PILOCARPINE.—Dr Ortille, of Lille (*Bull Général de Thérap. 1878*) gives an account of a case of obstinate hiccough in which, after trying all the usual remedies, he had recourse to electricity. For a few hours the application appeared to prove successful; but the hiccough caturned. Remembering what he had read of the action of pilocarpine upon the phrenic nerves and of the vomiting which often follows its use, he injected two-fifths of a grain of pilocarpine

under the skin. The effect was almost instantaneous. A quarter of an hour after the injection the patient was covered with sweat, salivation was established, and the hiccough had definitely ceased.—*London Med. Rec.* (*Canada Med. Rec.*)

NEW METHOD OF COVERING THE TASTE OF COD-LIVER OIL.—Dr. Ponteres mixes a tablespoonful of cod-liver oil with the yellow of an egg, and when they are thoroughly combined adds to them a few drops of spirits of mint and half a glass of sugar-water. In this way he obtains a sort of mulled egg, which differs very little from ordinary mulled egg, and which presents neither the taste nor the odor characteristic of cod-liver oil. It can consequently be taken without repugnance by the most fastidious patients.—*Union Med.*

REMOVAL OF MOLES UPON THE FACE.—Dr. Llewlen Thomas advises (*British Medical Journal*) the use of the acid nitrate of mercury for the removal of moles upon the face. No pain attends the application, if care be taken to prevent touching the surrounding skin. The growth gradually shrivels away; the slough falls off in about a week, leaving only a very faint depression like a very indistinct small-pox mark.—*Canada Med. Rec.*

TREATMENT OF WHOOPING-COUGH BY THE TINCTURE OF MYRRH.—According to Dr. Campardon, pertussis yields readily and easily to the tincture of myrrh. He gives fifteen drops in a tablespoonful of Vichy-water every hour or every two hours. This treatment, however, must be combined with the appropriate treatment for the bronchitis or the pulmonary congestion.—*Lyon Médical.*

TREATMENT OF CEREBRAL APOPLEXY BY INJECTIONS OF ERGOTINE.—Mr. Foster reports two cases of pronounced apoplectic coma, which were treated by the injection of twelve drops of a solution of ergotine containing seven and a-half grains to the drachm of vehicle. In both cases the coma disappeared soon and recovery took place. The essential condition for the success of the treatment is, that the injection be administered at the beginning of the attack, before there has been time for an extensive extravasation of blood. Mr. Foster recommends injecting the fluid between the muscles of the forearm, and not merely under the skin, where it is liable to excite suppuration.—*The Lancet. Med. Rec.*

TREATMENT OF CRACKED NIPPLES.—Dr. Haussmann has found that lint, soaked in a two per cent solution of carbolic acid, applied to the nipples, and wetted every two or three hours with the same, gives immediate relief to the pain, and causes complete healing (although the baby is still nursed from the nipples) in two to three days.—*Med Record.* J. S. B. A.

GYNÆCOLOGY.

GYNECOLOGY IN LUNATIC ASYLUMS.—Dr. Seguin remarks: By peripheral irritation I mean not only a nervous disturbance elsewhere in the brain, but an irritation of any of the organs. Dr. Storer has written a small work on the influence of uterine diseases over mental troubles, and has shed considerable light on the subject. I have no doubt that to-day a large number of females patients in asylums need a specialist and many could be cured by the replacement of a uterine version, or the curing of an inflammation. Superintendents of asylums, as a rule, are incapable of attending properly to these maladies, and they have an averson to calling in an outsider. Some have a great repugnance to such cases, for fear of being accused of assault. For very many reasons every asylum should have consulting physicians and surgeons. Dr. Storer cites case after case, showing a cause of insanity to be due to some uterine difficulty, and European statistical reports point the same way.—*Hosp. Gaz., N. Y.*

INNERVATION OF THE UTERUS AND OF ITS VESSELS.—A communication is made in the *Wien. Med. Jahrbucher* by v. Basch and Hoffman, giving the results of numerous experiments they have performed on dogs. They find that the uterus receives its motor fibers from two sources. On the one hand, from the hypogastic nerves proceeding from the posterior mesenteric ganglion; and, secondly, from nerve-fibers issuing from the sacral plexus. It is well known that Spiegelberg denied any motor power to the hypogastric branches, and Frankinhauser considered that the sacral branches were destitute of motor power. Now, according to the remarks of Basch and Hoffmann, a very distinct antagonism exists between these two sets of nerves. If the hypogastric be electrically stimulated, contraction of the circular fibers of the uterus take place, the cervix descends in the vagina, whilst the os opens. On the other hand on stimulation of the sacral nerves the longitude fibers are made to contract, the uterus becomes shorter, and the os remains closed. Suppression of respiration, or stimulation of the sciatic nerve, acts in a reflex manner, chiefly on the hypogastric nerves. Their experiments further showed that the vessels of the uterus obtain their nerves from the same sources as the muscular tissue, the nervi hypogastrici supplying the constructing and the sacral nerves the dilating fibers, which can likewise be brought into action reflectorially through the sciatics.—*Lancet.*

INFLUENCE OF UTERINE DISEASE ON NERVOUS DISORDERS.—A

recent writer counts among the most notable instances of this, neuralgia supra-orbitalis, maxillaris, and laryngo-bronchialis (uterine cough); also neuroses of the heart, causing painful palpitations, and spasmodic contractions of the bladder and bronchia (uterine asthma). All these symptoms become aggravated at the time of the commencement of the menstrual flow. The author observed one patient affected with this kind of asthma, who had long passed the climacteric, but whose asthmatic attacks were always most severe at the times at which the menses used to appear. Ordinary asthma also becomes worse under the influence of uterine disease.

Uterine affections frequently give rise to spasm of various muscles and to paralysis of one or both lower limbs. Both of these conditions usually come on very gradually, and they never become complete.

The peripheral reflex irritation caused by uterine diseases often acts, in conjunction with other causes (*e. g.*, hereditary taint, defective nutrition, domestic trouble, etc.), in giving rise to mental disease.—*Medical and Surg. Rep.* W. B.

OBSTETRICS.

PREMATURE LACTATION.—I was called to attend the child of Mrs. H., aged five months, and found it suffering with trismus nascentium or infantile lockjaw. The apartments were damp and other hygienic conditions bad, and probably caused the disease. Opium, chloroform, nitrate of amyl were tried without avail, and the child died the following day in a fit or spasm. Previous to leaving the house I carefully examined the lungs and heart in hopes of finding some inflammatory disease of the lungs which might account for the tetanus, and also the mammary glands. These glands were enlarged, and upon the application of the breast-pump milk was drawn from them both. There is a *theory* that premature lactation causes the tetanic symptoms in children, but it *has* not been established as a fact.

The recent works on infantile complaints state that lactation occurs in French and German children, but seldom, if ever, in those born here. Dr. Good, in his "Study of Medicine," reports three cases of this idiosyncrasy in girls and also one in a male Indian. An English midwife informs me that in England it is quite a common thing to see children a few months after birth give milk when the breast-pump is applied. The malformation (if it can be considered as such) is but an abnormal development of the glands due to some cause not understood.—*Hosgital Gaz.*

VERATRUM VIRIDE HYPODERMICALLY IN PUERPERAL ECLAMPSIA.—Puerperal eclampsia has been successfully treated in four cases by veratrum viride, administered hypodermically, by Dr. G. W. Griggs. The dose used was from two to four drops of the tincture, administered as often as necessary to keep the pulse down to sixty.—*Southern Clinic.*

DR. MURCHISON says: (1.) The duration of the incubation stage (of scarlatina) may be only a few hours. (2.) Probably in a large proportion of cases it does not exceed forty-eight hours. (3.) It very rarely exceeds seven days. (4.) Consequently, a person who has been exposed to scarlet fever, and does not sicken after a week's quarantine, may be pronounced safe. He thinks, too, that facts prove the infecting power of scarlet fever from its earliest stage, although probably it is less during the first two or three days than a case of measles. On the contrary its power of infection may extend over a period of many weeks. To pronounce a patient out of danger at the end of a month, after the apparent cessation of desquamation, is not always safe. He considers it a good rule to consider no case safe until after the eighth week.—*Boston Med. and Sur. Jour.*

PROFESSOR PENROSE recommends vinegar in post partum hemorrhage for the following reasons: (1.) It can be easily obtained. (2.) It can be easily applied, and instantly, without special apparatus. (3.) It always cures the hemorrhage, or rather it has not failed in his practice. (4.) It is sufficiently irritating to excite the most sluggish uterus to contraction, and yet not so irritating as to be subsequently injurious. (5.) It is an admirable antiseptic. (6.) It acts upon the lining membrane of the uterus as an astringent. The remedy is applied as follows: saturate a rag or sponge with vinegar, carry it into the cavity of the uterus, and squeeze it.—*Boston Med. and Sur. Jour.* W. C.

DISEASES OF THE NERVOUS SYSTEM.

PECULIARITIES OF INEBRIETY.—In his fourth annual report of the Asylum for Inebriates at Walnut Hill, Hartford, Conn., Dr. T. Crothers gives the particulars of a number of cases which have been under treatment. Many curious facts are presented, in a history of these cases, illustrating the periodic character of the drink-craving, which returns after an interval that can be definitely calculated within an hour; or the insane-like madness which ignores everything but the gratification of its impulses; or the precipitate revulsion of character and motive

passing swiftly from one extreme to the other; or the sudden explosion of the diseased impulses, under conditions of excitement and change, etc. All these are significant of laws and forces moving in regular cycles as fixed and definite as that which governs the planets.—*Medical and Sur. Rep.*

HYDROPHOBIA CURED BY OXYGEN.—This case is reported by Drs. Schmit and Zebeden from Russia: The first symptoms of rabies appeared seventeen days after the injury. The patient was made to inhale three cubic feet of oxygen, and two hours afterwards he was in a state of perfect calm. Two days afterwards the symptoms of rabies reappeared, and another inhalation of oxygen was administered with the same success. This time the inhalation was continued for forty-five minutes. A slight dyspnœa, which persisted after the disappearance of the graver symptoms, was treated for three weeks by the monobromide of camphor.—*Lyon Medical.* C. H. H.

PHYSIOLOGY.

ORIGIN OF AMNIOTIC FLUID.—(Gusserow. *Arch. f. Gynäk.* XIII.) In 1871 G. demonstrated that soluble substances would pass by way of the circulation from mother to child, and from the latter to the amniotic fluid. He claims that this fluid is not only an exclusively fœtal product, but that during the latter months of pregnancy it is mostly secreted by its kidneys.

Runge and Shmiedeberg proved that the conversion of benzoic into hippuric acid occurs only in the kidney. If hippuric acid be found in the urine of the fœtus after the mother had taken benzoic acid, the former must perforce have been formed in the kidneys of the fœtus, the blood carried to the latter being charged with benzoic acid. So, if hippuric acid be found in the amniotic fluid it must have been formed in the kidneys also, for if that fluid were merely a transudate, benzoic and not hippuric acid would be present.

Gusserow shows in a striking way that both the urine and amniotic fluid of the child contain hippuric acid when one to two grams of sodic benzoate were administered to the parturient several hours prior to rupture of the membranes.

From these and such experiments as the injection of strychnia, he is led to believe that the amniotic fluid is mainly an excretion of the child, though it may have other minor sources.—*Chicago Med. Jour. and Ex.* I. N. L.

News Items.

CALL FOR A CONVENTION OF ALL AMERICAN MEDICAL COLLEGES, TO BE HELD IN THE CITY OF ATLANTA, GA., BEGINNING AT 10 A. M., FRIDAY, MAY 2D, 1879.

ED ST. LOUIS MED. AND SURG. JOURNAL:

DEAR SIR:—At the meeting of the American "Medical College Association," held in Buffalo, N. Y., June 1878, Prof. S. D., Gross, a delegate from Jefferson Medical College, of Philadelphia, offered the following preamble and resolutions:

"WHEREAS, It is eminently desirable that the medical schools of this country should adopt a uniform system of instruction of a grade fully in accord with the requirements of the age in other branches of study, and with the practice of the medical institutions of Europe; and,

"WHEREAS, All the efforts to bring about such a change on the part of the American Medical Association, of the Association of Medical Teachers assembled at Cincinnati in 1867, and at Washington in 1869, and of different State Medical societies, have signally failed; and,

WHEREAS, The present time seems to be peculiarly favorable for taking strong ground upon the subject, inasmuch as it is now attracting general attention throughout the United States; therefore,

"*Resolved*, That this Association respectfully and earnestly request that the regularly organized and accredited medical schools of the United States hold at their earliest convenience a meeting for the purpose of adopting some definite and final action upon a subject of such vital importance to the dignity, character and usefulness of the profession and the welfare of the American people.

"*Resolved*, That in order to impart proper efficiency to this plan each and every college be requested to send two delegates, consisting of one member of each board of trustees, and of one member of each faculty, with full power to act for their respective institutions.

"*Resolved*, That the medical and secular press throughout the United States be respectfully requested to lend their aid in the dissemination and discussion of these preambles and resolutions in order to place the whole matter of medical education prominently before the profession and the people.

"*Resolved*, That a copy of these preambles and resolutions, signed by the President and Secretary of this Association, be transmitted to the officers of every regularly constituted medical college in the United States, with a request to hold the con-

templated meeting at Washington City, or at some other central point, on the first Wednesday in September next, or as soon thereafter as possible."

Prof. N. S. Davis seconded these preambles and resolutions, and heartily endorsed them.

Prof. T. G. Richardson moved that the time of the proposed meeting be fixed at the Friday preceding the meeting of the American Medical Association, and that the place be designated by the President of this Association. This amendment was adopted, and the preamble and resolutions as amended were adopted.

In compliance with this action of the American Medical College Association, its Acting President, Prof. N. S. Davis, of Chicago, has designated *Atlanta, Ga.*, as the *place* of the proposed convention, while the aforementioned action of the Association has fixed the *time* at 10 A. M. Friday, May 2d, 1879. It is earnestly hoped that the delegates from all "regularly organized and accredited medical schools" in the United States will promptly meet at the above designated time and place. That the action of the convention may be definite, it is desired that each college send two delegates, with full power to act for their respective institutions—one of these delegates to be selected from the board of trustees and one from the faculty.

In general terms, the *object* of the convention is to adopt some "uniform system of instruction more in harmony with the requirements of the age." Among the questions appropriate for discussion and decision may be mentioned, "Shall all the colleges require attendance upon three regular courses of lectures during three separate years ere admitting students to become candidates for the degree of M. D.?

Is any uniform system possible in this or other things? If so, to what extent is it possible or even desirable at the present time? Each doctor in the land doubtless has in mind an ideal medical college system. But this convention cannot act upon idealities; it can only act upon that which is practicable to all honest efficient medical schools.

It is hoped that the medical press and teaching fraternity will freely and exhaustively discuss the subject matter of this convention. The doing of this at once will enable it to enter upon its labors with a complete knowledge of the facts in the case.

To avoid misconception, let it be distinctly noticed that, although this convention is called by the "American Medical College Association," it is entirely distinct from that body. When assembled, the convention will elect its own officers and adopt its own methods for transacting its business in pursuance with the object of the call.

NATHAN S. DAVIS, M. D.,
Acting Pres. of the Am. Med. Col. Ass.

LEARTUS CONNOR, M. D., Secy., Detroit, Mich.
FEBRUARY 6TH, 1879.

Editorial.

It is manifest to every one that a publication that has its composing room and press room a mile apart, must labor under very great disadvantages. From one cause or another, delays will occur from circumstances that it was impossible to foresee or overcome. To obviate this, we have added to our establishment a steam engine and a large Hoe cylinder press. After the issue of the May number, we expect that the JOURNAL will be punctually on time.

It will be noticed that the JOURNAL does not contain the usual 128 pages. The lateness of this issue compels us to leave out a large amount of interesting reading matter, among which is a correspondence of Dr. Frank H. Hamilton; contributions from Dr. Andrews of Chicago, and from Dr. Geo. M. Beard, of New York etc.; we are also compelled to delay until the next issue quite a number of book reviews, book notices, etc.

The American Medical Association meets in Atlanta, Ga., on the 6th of May. It is expected that there will be a large attendance.

MISSOURI STATE MEDICAL ASSOCIATION.

The Medical Association of the State of Missouri will hold its next annual meeting at Columbia, Mo., May 20th, 1879, at 10 A. M.

The change of *place* has been rendered necessary as the Association could not be entertained at Sweet Springs at the time appointed by the By-laws.

Indications already point to a large and interesting session.

P. S.—Members on arriving at Columbia will at once report at Garth Hall, Broadway. A. J. STEELE, Cor. Sec'y.

METEOROLOGICAL OBSERVATIONS.

By A. WISLIZENUS, M. D.

The following observations of daily temperature in St. Louis are made with a MAXIMUM and MINIMUM thermometer (of Green, N. Y.). The daily minimum occurs generally in the night, the maximum at p. m. The monthly mean of the daily minima and maxima added and divided by 2, gives quite a reliable mean of the monthly temperature.

THERMOMETER, FAHRENHEIT—FEBRUARY, 1879.

Day of Month	Minimum.	Maximum.	Day of Month.	Minimum.	Maximum.
1	26.0	32.0	18	21.0	31.0
2	22.0	39.0	19	26.0	40.0
3	31.0	39.0	20	21.0	35.5
4	33.5	44.0	21	27.0	43.0
5	31.5	33.0	22	37.0	49.0
6	29.0	36.0	23	33.0	46.5
7	26.0	40.5	24	38.0	58.0
8	29.0	48.0	25	40.0	54.0
9	28.5	44.0	26	10.0	21.0
10	38.0	53.5	27	12.0	31.0
11	37.0	43.0	28	30.0	55.0
12	23.0	34.5	29		
13	11.0	18.0	30		
14	4.0	18.0	31		
15	13.0	35 0			
16	29.0	37.0	Means	26.4	39.0
17	32.0	34.0	Monthly Mean	32.7	

Quantity of rain 1.56 inches.

ERRATA: The maximum in December, 1878, was —1.0 deg. on the 24th
" " " January, 1879, was —10.5 degs. on the 3rd.

MORTALITY REPORT.---CITY OF ST. LOUIS.

FROM JAN. 26, 1879, TO FEB. 22, 1879, INCLUSIVE.

Septicæmia.....	Cholera Infantum. 1	Hydrocephalus and	Apoplexy 5
Measles	Inanition, Want of	Tubercular Men-	Cyanosis and At-
Syphilis, Cong'al.. 2	Breast Milk, etc.29	ingitis 2	electasis 2
Scarlatina 2	Alcoholism..... 1	Meningitis and En-	Premature and Pre-
Pyæmia 2	Rheumatism and	cephalitis..... 7	ternatural Birth..15
Erysipelas..... 8	Gout..... 5	All Diseases of the	Surgical Operat'ns.
Diphtheria 8	Cancer 9	Brain and Ner-	Deaths by Suicide.. 1
MembranousCroup10	Phthisis Pulmon..71	vous System.....21	Deaths by Accid'nt. 7
Whooping Cough.. 1	Bronchitis.....24	Cirrhosis of Liver	
Gangrene..... 1	Pleuritis.....	and Hepatitis .. 9	Total Deaths from
Typhoid Fever.... 7	Pneumonia 66	Enteritis, Gastro-	all Causes.....436
Cerebro Spinal Fe. 1	Heart Diseases....17	Enteritis, Peri-	Total Zymotic Dis-
Remittent, Inter-	Other Diseases of	tonitis, and Gas-	eases.....107
mittent, Typho-	Respirt'y Organs22	tritis.....12	Total Constitution-
Malarial, Con-	Entero-Colitis.....27	Bright's Disease	al Diseases..... 97
gestive and Sim-	Marasmus—Tabes	and Nephritis... 4	Total Local Dis-
ple Continued	Mesenterica and	Other Diseases of	eases.....207
Fevers.....12	Scrofula 9	Urinary Organs. 2	Total Develop'tal
Puerperal Disea's 13	Convulsions 18	Chronic lead pois-	Diseases..... 17
Diarrhœal " 10	Aneurism	oning.....	Deaths by Viol'ce. 8

CHAS. W. FRANCIS, *Health Commissioner.*

DEATHS AND RATE OF MORTALITY

Per 1000 Inhabitants, Annually, in the Largest American and Foreign Cities, According to the Latest Returns.

CITIES.	Population.	Date of Return.	Deaths from all Causes.	Annual Death Rate per 1000	Deaths.	
					Infants under 1 Year of Age.	Persons Aged 60 Y'rs and upwards.
New York	1,086,000	5 weeks ending Feb 22	2,929	28.01	.....	.....
Philadelphia	877,500	4 " " Mar 1	1,363	20.12	.....	.....
Brooklyn	549,500	4 " " " 1	859	20.50	.....	.....
St. Louis	503,000	4 " " Feb 22	436	11.07	.....	.....
Chicago	460,000	Month of February	535	14.85	.....	.....
Baltimore	355,000	4 weeks ending Mar 1	570	20.80	.....	.....
Boston	353,000	4 " " " 1	596	21.95	.....	.....
San Francisco, Cal.	300,000	Month of January	463	18.28	.....	.....
Cincinnati	280,000	4 weeks ending Mar 1	409	19.23	.....	.....
New Orleans	210,000	4 weeks ending Mar 2	353	21.36	.....	.....
Buffalo	170,000	.....	....	.....	.....	.....
Cleveland	162,000	2 weeks ending Feb 8	81	13.00	.....	.....
Washington, D. C.	160,000	Month of January	374	27.37	.....	.....
Pittsburgh	145,000	" " February	225	20.13	.....	.....
Newark	126,000	2 mos. ending Mar 31	600	29.23	.....	.....
Detroit	125,000	.....	....	.....	.....	.....
Milwaukee, Wis	123,600	Months Nov. and Dec.	277	13.40	.....	.....
Richmond Va	79,000	Month of February	129	25.88	.....	.....
New Haven, Conn	60,000	" " "	85	18.25	.....	.....
Charleston	57,000	4 weeks ending Mar 1	198	24.68	.....	.....
Memphis, Tenn	50,000	.....	....	.....	.....	.....
Mobile	40,000	.....	....	.....	.....	.....
Denver		.....	....	.....	.....	.....
Galveston		.....	....	.....	.....	.....
Indianapolis		.....	....	.....	.....	.....
Springfield, Mass.	31,500	.....	....	.....	.....	.....
Nashville, Tenn	27,000	Month of February	54	23.91	.....	.....
Sacramento	25,000	.....	....	.....	.....	.....
St. Paul, Minn	20,000	.....	....	.....	.....	.....
London	3,577,304	Feburary 9 to 15	1,646	23.70	.....	.....
Paris	1,988,806	" 8 to 14	1,019	26.60	.....	.....
Berlin	1,019,628	Jan 26 to Feb 1	503	34.90	.....	.....
Vienna	727,271	February 2 to 8	373	36.30	.....	.....
St. Petersburgh	869,741	Jan 26 to Feb 1	685	51.30	.....	.....
Bombay	644,405	January 1 to 7	487	31.00	.....	.....
Glasgow	566,940	February 9 to 15	295	25.80	.....	.....
Liverpool	532,681	" 9 to 15	367	35.60	.....	.....
Naples	475,407	December 10 to 16	277	31.60	.....	.....
Calcutta	429,535	Dec 29 to Jan 4	409	49.60	.....	.....
Hamburg	406,104	February 2 to 8	217	27.00	.....	.....
Birmingham	383,117	February 9 to 15	192	25,80	.....	.....
Brussels	175,785	" 9 to 15	196	26 60	.....	.....
Manchester	360,514	" 9 to 15	281	40.50	.....	.....
Dublin	314,666	" 9 to 15	337	55.90	.....	.....
Leeds	304,948	" 9 to 15	148	24.80	.....	.....
Amsterdam	302,266	" 2 to 8	172	39.01	.....	.....
Sheffield	289,587	" 9 to 15	125	21.90	.....	.....
Rome	286,400	Dec 29 to Jan 4	94	16.70	.....	.....
Turin	227,846	Jan 26 to Feb 1	109	20.80	.....	.....
Alexandria	212,034	" 26 to " 1	149	36.50	.....	.....
Breslau	167,000	February 2 to 8	141	27.20	.....	.....
Edinburgh	122,371	" 9 to 15	103	23.70	.....	.....
Dresden	207,845	" 2 to 8	90	22.00	.....	.....
Bradford	185,088	" 9 to 15	79	21.60	.....	.....
Salford	170,251	" 9 to 15	110	32.30	.....	.....
Nottingham	165,267	.....	....	.....	.....	.....
Hull	143,139	February 9 to 15	59	21.00	.....	.....
Dundee	142,957	.....	....	.....	.....	.....
Portsmouth	129,461	.....	....	.....	.....	.....
Leicester	121,473	.....	....	.....	.....	.....
Oldham	107,366	.....	....	.....	.....	.....
Brighton	103,923	.....	....	.....	.....	.....

THE

SAINT LOUIS

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Original Contributions.

ARTICLE XXII.

CASES OF NEURASTHENIA (NERVOUS EXHAUSTION), WITH REMARKS ON TREATMENT.

By GEORGE M. BEARD, M. D., of New York City.

The generic term, *Neurasthenia*, (nervous exhaustion) I have sub-divided into *cerebrasthenia*, (exhaustion of the brain) and *myelasthenia*, (exhaustion of the spinal cord).[1]

The details both of treatment and hygiene of cerebrasthenia, are in some respects quite different from the treatment of myelasthenia.

Both forms, however, are to be treated under the guidance of the same general principles, the minute management being different, not only for the two sub-divisions, but different for individuals.

1. For a more detailed description of the disease, I may refer to my original paper on the subject, *Boston Med. and Surg. Journal*, April 28th, 1869, and also to Erb's chapter on Neurasthenia in vol. xiii, of Ziemssen's Cyclopedia. The nature and defferential diagnosis of neurasthenia were analyzed in the *N. Y. Medical Journal*, March, 1879. The defferentiation be-

The general principles by which we are to be guided in the treatment of neurasthenia and allied disorders, may be condensed in the following aphorisms:

1. The treatment should, in the main, be constitutional, with special attention to local manifestations, whenever they become severe. To devote the whole attention to special and local phases, as spinal irritation, cerebral fullness, asthenopia, oxaluria, spermatorrhœa, insomnia or nervous dyspepsia is unphilosophical and can never be successful.

2. Dependence should be placed not on any one exclusive mode of treatment, but rather on a combination of various methods. Sedatives and tonics are the chief agents, among which the following deserve chief mention: Electricity in the methods of general faradization and central galvanization, arsenic in its different forms, as Fowler's solution, and chloro-phosphide, arsenite of strychnia, ergot, cannabis indica, all the bromides, quinine, iodide of potassium, digitalis, calabar bean, conium, gelsemin, belladonna, malt, oil, phosphorus, strychnine, iodoform, cimicifugin, kumyss and the salts of zinc; counter-irritation, mental therapeutics, massage, ice bags and hot water bags and hydrotherapy in the form of hot, warm and cold baths, Russian baths and douches. Out of this large *repertoire*, it is possible to find some combination that will suit the needs of every case. If I were restricted to just one dozen remedies I should chose electricity, arsenic, ergot, quinine, bromides, strychine, iron, oil, phosphorus and mental therapeutics, hydro-therapeutics and counter-irritation. If I were restricted to just one remedy, I should use electricity.

Erb suggests quinine and iron as the chief remedies. I have seen cases by the dozen, that had taken quinine and iron, judiciously and faithfully given, and who were still uncured and unrelieved. There is, in fact, no routine plan of treatment for these cases. Each case must be studied closely and carefully by itself.

3. The treatment should be frequently changed, according to the needs of the patient.

It is not possible to set the rudder, so that a ship may steer straight across the Atlantic; it must be watched each moment

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tween cerebrasthenia and myelasthenia, I first presented in an article in the *Journal of Nervous Diseases*, 1874. The symptoms of both forms of the disease, were described in detail in the *Virginia Med. Monthly*, June, 1878, and the *Journal of Nervous Diseases*, April, 1879.

and shifted with the winds and currents; it is usually impossible by a single prescription, to steer a neurasthenic sufferer over the long voyage to health.

Individual idiosyncrasies must be religiously respected, and when we find one cannot bear gelsemin or belladonna, for example, we can fall back on other remedies.

4. Medical treatment to be surely effective must be combined with hygienic treatment. In correct analysis, hygiene is therapeutics, the distinctions we are wont to draw between them being purely arbitrary. In some cases, particularly in cerebrasthenia (brain exhaustion), vigorous out-door exercise is required, and the more, within reasonable limits, the better; in other cases only very moderate exercise should be allowed; in other cases, particularly in severe myelasthenia, or exhaustion of the cord, absolute rest in bed, in quiet if not darkened rooms, is needed, if we would get in the shortest possible time the best results. The practical mistake so often made, is in treating all these three classes in the same way, shutting up those who need exercise, and exhorting those to work and travel who should be kept in bed. In diet, also, all cannot be treated alike; the reaction against the starvation theories of the last century, has induced a return to the habit of over-feeding; hence, some need to be cautioned in this regard, while others must be coaxed and tempted to eat more than has been their custom. Abstaining from starch and sugars, or using these substances but moderately, and in their place making as free use as the digestive organs will allow of fats, oils, as fish, oysters, butter, milk and cereal phosphates, is a potent adjunct to the treatment.

The special effects of this plan of treatment, when properly carried out in its details, are relief of pain and depression, improvement in sleep, improvement in circulation, improvement in appetite and digestion, improvement in body weight, improvement in capacity for muscular and cerebral toil; and these effects and signs of better nutrition appear with special variations, about in the order named; in some cases, particularly in aggravated myelasthenia, they appear more rapidly and more surely when the patient is kept quiet in the house, if not in the bed; in other cases they appear rapidly and surely, when the patient attends to his regular occupation. These effects appear, also, when only general and central applications of electricity are used, unaided by any other therapeutic procedure, but they are far

more likely to appear when combined treatment is employed.

Complications of neurasthenia that are very frequent are oxaluria, nervous dyspepsia, neurasthenia, asthenopia, impotence, spermatorrhœa and spinal irritation, and these require usually special consideration.

The following cases are designed to illustrate clinically the practical points in the diagnosis of neurasthenia, and especially the differential diagnosis of cerebrasthenia and myelasthenia, as well as some of the principles of treatment for such cases without entering into the minute details.

Neurasthenic patients treated perseveringly, according to those principles, always improve, and frequently recover approximately, if not absolutely. Cases that, if long neglected, would become permanent invalids, can thus be saved to themselves and their friends.

A young man of nervous organization, with delicate skin and fine hair, consulted me four years ago for an extended catalogue of nervous symptoms from which he had suffered, more or less, for a number of years. He prepared for me what he called a partial list of his abnormal sensations, as follows:

1. Fullness in the stomach after eating and drinking; apparently flatulence.
2. Severe constipation, varying at times.
3. High colored urine, with brickdust deposit. In all probability there was oxaluria and very likely uric acid, so often found in these cases.
4. Irresistible tendency to sleep, after eating especially.
5. Paresis of the bladder, with slight difficulty in making water.
6. Stinging and burning feeling in the urethra, at times very acute, and mucous membrane congested; burning and swollen feeling in the throat.
7. Pain in different regions of the back, at times severe.
8. Eczema in the perineal regions, with severe itching and burning; also soreness in the rectum, and in the region of the prostate; likewise eczema of the ears attended with itching.
9. Decided diminution in sexual desire and erectile power.
10. Distressing feeling in the stomach when empty; only relieved by eating.
11. Great disinclination to drink and great intolerance of fluids on the part of the stomach.

12. Remarkable dryness of the skin, with absence of perspiration in hot weather or even in the Turkish bath, unless in a very high temperature.

13. Great senitiveness to cold; feet and legs usually cold, which coldness is sometimes followed by, or alternated with, a burning sensation; impossible to sleep in a room where the temperature is below 60°.

14. Ringing in the ears, and severe pain in the head on stooping.

15. Pulse abnormally slow, frequently as slow as forty-two and forty five.

16. Unnaturally large appetite, that almost compels over-eating.

17. Cracking of the joints of the jaws, caused by dryness of the secretions.

18. Heaviness of the limbs.

Any patient consulting a physician for this array of morbid phenomena would not be likely to obtain the same diagnosis from all; more likely he would have as many different diagnoses as physicians; this was, I believe, the case with this gentleman.

The diagnosis would depend on the degree of importance that each special symptom, or asserted symptom, might take in the mind of the physician to whom the case was referred. Hypochondria would be a quite obvious diagnosis; but this was negatived by the manner of the patient and the real, objective demonstrable character of some of the symptoms. He did not appear to be hypochondriacal; but rather studied his malady with coolness and in a certain philosophic spirit.

Nervous dyspepsia would be a natural and almost inevitable solution of the difficulty; and he certainly had nervous dyspepsia. A strong and to many convincing confirmation of this diagnosis was the fact that the patient had been inclined to habitually over-eat; and, most significant of all, he had found that the majority of his symptoms were relieved or disappeared, on reducing the quantity of his food one-half, no change being made in the quality and no other treatment being used. The drowsiness would suggest to many cerebral anæmia.

Oxaluria is with many a favorite diagnosis in these cases, but in a broad study of these symptoms in all their relations we find that the urates, the oxalates when in excess, and the dyspepsia are themselves symptoms of a morbid state—a result of a common

cause—a neurasthenia, which in the present case chiefly though not entirely attacks the brain. This diagnosis accounts for the phenomena, including the facts that the dyspepsia was itself a cause and center of other symptom. The truth is that if this man had been entirely strong and tough in nerve he would never have had dyspepsia or oxaluria, and the dyspepsia, if it should arise, would not have excited so many morbid sensations in other parts of the body. Even after the dyspepsia was cured, or very greatly relieved, by dieting and management, the patient was yet quite far from well, for constipation of a most obstinate character remained. The average ultimate effect of treatment was very satisfactory.

CASE II.—In this case cerebrasthenia and myelasthenia were combined, existing at the same time or in alternation, and both persisted for a number of years. The temperament of the patient was nervous; the hair was fine and soft, and in all respects he was very sensitive. In his childhood he was troubled with general nervousness and at puberty with great sensitiveness of the gums and occasional headache. The first prominent symptoms, as is so often the case in neurasthenia, was nervous dyspepsia, which was accompanied by many distressing phenomena, such as sharp pains through the back and pit of the stomach, especially when empty; pain and cramps in the calf of the leg; great loss of flesh; a spasm was often felt in the pit of the stomach on slight mental excitement; there were also occasional cardiac palpitations, and the circulation was so poor that sleep could be obtained only by the use of extra means of keeping warm. All these symptoms appeared at the age of eighteen, and continued for two years, when, under a change of manner of life, treatment and hygiene, he so far improved that he could continue his occupatien. In subsequent years he was attacked with sick-headache, neuralgia and at times, especially in the extreme hot weather of summer, was severely prostrated, so that it was almost impossible for him to walk or even move; these fits of extreme exhaustation would come upon him suddenly when riding or roaming about; it would seem beyond his power to rise from a chair in which he was sitting or to take a single step or make any muscular effort whatsoever; the brain meanwhile was tolerably strong; there was far more myelasthenia than cerebrasthenia. Later the symptoms of positive pain in the back appeared,

in the nape of the neck, between the shoulders, or on the shoulder blades, at other times in the lumbar region; this back pain was usually attended with spinal irritation, which symptom came and went from day to day, and even from hour to hour. Pressure on the chest in company with irritation of the dorsal vertebræ was often noticed, and when the lumbar vertebræ were specially affected there was considerable flatulence, which was quite annoying.

Another frequent symptom, when he first consulted me, was heaviness of the legs and arms, not amounting to absolute pain, but exceedingly distressing, and much resembling the feeling that we experience when we have just taken cold. Numbness of the hands and fingers, and disposition to fall asleep on slight pressure, particularly observed on waking up in the night after long laying upon one of the limbs or in the morning; likewise the same symptoms in the legs after long sitting, especially while riding in an omnibus or carriage or car.

Sharp, shooting, darting lightning-like pains were noticed, off and on for years; these pains were precisely such pains as are supposed to be diagnostic of ataxy, and to many physicians, taken in connection with the pains in the back, and the tenderness of the spine, would have been sufficient for a diagnosis of ataxy. More interesting still was the symptom of heat and burning and tenderness, or of anæsthesia at the bottoms of the feet, always worst when the lower part of the spine was most tender[2] and heavy (this also is regarded as one of the phenomena of ataxy); also jerking of the arms and legs, or of the whole body, just as if he was falling asleep at night. Twitchings of the muscles (fibrillary contractions) in the upper and lower extremities night and day, that naturally, according to the popular teachings, suggested progessive muscular atrophy, were felt by times in connection with the lightning pains and plantar anæsthesia.

At times, also, and not unfrequently, there was asthenopia, for which the condition of the muscles and accommodative apparatus, when examined by skilled oculists, did not fully account. This

2. In all diseases of the spinal cord *tenderness* of the vertebræ is, so far, a good symptom, suggestive of functional more than organic disease; and in cases of ataxy and muscular atrophy where some of the vertebræ are tender the prognosis is always better than when such tenderness does not exist.

asthenopia, like the spinal irritation, came and went, the attacks lasting for a few hours, or a few days, or a few weeks, according to the hygiene of the patient. Most of the above symptoms were the direct product of myelasthenia, or spinal exhaustion, with waves or rushes of spinal hyperæmia, but after a few years the brain suffered almost as much, for all the phenomena of cerebral irritation and congestion were likewise present at various stages of his malady; tenderness of the scalp at one point or many points, heat and pain at the vertex, tenderness when the hair was brushed or the hairs were even touched very lightly; all sorts of noises in the ears, explosions, buzzing, ringing, hissing, singing, constant or intermittent, attacks of injection of the conjunctiva, the clavus hystericus, feeling of fullness and pressure in the head and ears, insomnia, not absolute, but uncertainty of sleep with many dreams, sometimes bad and harrassing; drowsiness after meals or stupor. There was no marked failure of memory or as a rule much mental depression. There was sometimes a bad taste in the mouth, not clearly connected with the stomach, and disagreable subjective odors sometimes appeared. A natural result of all these conditions was great sensitiveness to the extremes both of heat and cold; thick clothing by day and many layers of blankets by night were needed; and, after meals especially, there was painful chilliness with creeping up and down the spine, or formication.

His capacity for work varied, but, in general, he was equal to quite severe mental tasks, and likewise able to walk moderately long distances. In the hot weather of summer, however, the neurasthenia was often so much increased that long walking or standing were unendurable, and were likely to be followed by pain in the back, neuralgia and insomnia; excessive use of the arms also caused pains in the back between the shoulders and on the shoulder-blades; and over-exertion of any kind was likely to bring on an attack of sick headache.

A case like the above might, in Germany, have been diagnosed as incipient locomotor ataxy, or at least spinal congestion, if not some other lesion or morbid state of the cord; and when cured, or greatly relieved by treatment, would have been reported as a case of ataxy cured; recent German literature contains a number of such cases, and they have done not a little harm to the cause of electro-therapeutics, because those who

use that mode of treatment in real ataxy do not confirm the reported German results, and hence discredit electricity in medicine.[3] It is quite probable that the cures of ataxy published by Remak were really cures of neurasthenia or at least of simple spinal congestion; similar errors have crept into the neurological literature of other countries. A physician attacked with these symptoms would, on reading the literature of ataxy, and diseases of the cord in general, naturally and inevitably conclude without any element of error from hypochondria, that he had the beginninings, if not the incurable stage, of grave lesion of of the spinal cord; all the best authorites would force him to that painfully erroneous diagnosis. A number of intelligent physicians with these symptoms, and fearing therefore ataxy or atrophy, have consulted me during the past few years. In this case there were rushes of blood to the nerve center—cerebral and spinal plethora—without any question; but this was no more the disease, in a distinct logical sense, than was the dyspepsia or the backache or the asthenopia.

This patient has not been in later years anæmic; there has never been any evidence of cerebral or spinal anæmia. Under various sedative and tonic treatment this case so far improved that he has for a number of years been very actively engaged in an intellectual occupation and, on the whole, he was never so well as during the part year; most of the symptoms that simulated ataxy have disappeared; but on sustained over-exertion or bad hygiene of any sort they could, no doubt, all be brought on again in full force.

The following case is one of pure cerebrasthenia (brain exhaustion) and is especially interesting on account of the symptoms of agoralbetrie (fear of fears); also the fact that sunstroke was an exciting cause.

CASE III.—A gentleman of middle life, a clergyman by profession, had been engaged in labors of his calling in charge of a church under circumstances that drew severely on his patience and tact; about the same time he was prostrated by exposure to excessive heat, and the sequelæ of this prostration were of a

3. I frequently meet in this city a literary gentleman in whom, many years ago, the diagnosis of *locomotor* ataxy was made by a skilled neurologist, on the strength of some of the above symptoms; the gentleman then consulted me. He had no ataxy, and is not likely to have.

character quite frequently observed, namely a multitudinous array of nervous symptoms which annoyed him for a long time. These two factors together, acting on an inherited nervous diathesis, brought on a cerebrasthenia which, when I first saw the patient, had been present for a number of years, and had compelled him to change his ministerial position for that of teaching. He complained, first of all, of cerebral attacks, analogous to sick headache, and with some of the symptoms of sick headache, but yet of quite a different character from the ordinary sick headache; there would be pain in the head and dimness of vision, with a sense of fullness, which would last for a number of hours unless cut short by the administration of one or two drops of belladonna that he found to be almost a specific.

Other symptoms were indigestion, depression and at certain seasons, more or less diminution of sexual power. There was little or no trouble in the back, and no evidence of very great muscular debility; he could walk and work with the arms; all his symptoms pointed to the brain, especially these nervous attacks which, when they were upon him, unfitted him for any labor or enjoyment. They were excited by pulpit work, and, indeed by any form of mental annoyance, or by a feeling of responsibility; even the slight task of leading an evening prayer meeting or attending a funeral, was sufficient to induce an attack.

One cerebral symptom of which he complained was agoraphobia, or fear of places, in a mild form; he disliked to travel alone on the cars, and did so, if at all, with great discomfort. There was much difficulty in coming to my office, although he lived but a short distance out of town. There was likewise some impairment of memory, but not of a very important degree. Everything in his history and symptoms indicated debility, adynamia, neurasthenia, and that this did not depend on pure anæmia, the complete picture of his morbid sensations and phenomena pretty clearly negatived. Iron alone was of little, if of any service, whereas he was certainly benefitted by various electrical and medical treatment directed to the nervous system.

CASE V.—A young man endowed with considerable skill as an inventor, had severely over-worked himself in the bad air of a factory in which he was interested, and the following symptoms of cerebrasthenia (brain exhaustion) appeared:

He complained much of attacks of vertigo coming on, or

liable to come on at any time, but especially when at work in the shop where he was first taken. So disagreeable was this symptom, that he dreaded to go to the factory, and when I first saw him, which was eight months after the first attack, he had given up going there almost entirely.

This was a form of agoraphobia, or fear of places, so often seen in cerebrasthenia, and was not associated with any evidences of myelasthenia or exhaustion of the spinal cord, for he could walk many miles daily, and was capable physically of undergoing great exertion in any other locality, except the dreaded factory, where the evil symptom of vertigo first came upon him. Another form of morbid fear from which he suffered, was what I call anthrophobia, fear of man or society; he dreaded to go into any company where anything was expected from him, where even the slightest responsibility rested upon him; consequently he avoided society. It was not the mere presence of numbers of people that he dreaded, but the responsibility that might rest upon him; he feared that the vertigo might return if he attempted to do anything in company. An audience, even a large audience, was no terror to him, provided nothing was expected of himself.

He was treated a number of weeks by nerve food, central galvanization, general faradization, and galvanization of the sympathetic, and recovered and resumed his duties.

The following case of myelasthenia was evidently of sexual origin in part, and was somewhat complicated with cerebrasthenia:

CASE VI.—In the summer of 1878, a young gentleman 30 years of age was brought to me, representing, to use the language of his physician, "a thoroughly demoralized patient." Was married and of good constitution, but had led a somewhat confined life. The symptoms of which he complained were pains in the lumbar regions of the back, fatigue on walking or working, insomnia, untrustworthiness of memory, and attacks of severe mental depression. There was a clear history of sexual excesses in an unnatural way before marriage, in a natural way since, and the reproductive organs showed very markedly in the present trouble. There was in this case, then, both myelasthenia and cerebrasthenia, the irritation both of the brain and spinal cord. The symptoms were not of very long standing, but of a

few months in the present attack. And a favorable prognosis was given, which was confirmed by the results. He was treated by general faradization, by the use of sounds to strengthen the urethra, and by local faradization both internally and externally. In the course of a month he had so far improved that he could attend to his business, and a short trip to the country added very much in his restoration, which was, I believe, very nearly absolute.

In this case the myelasthenia was not accompanied by spinal irritation. There was no tenderness of any portion of the spine, even when there was cerebral pain and aching. Erb of Heidelberg, raises the query whether this neurasthenic state of the spine, which I call myelasthenia, is not for men what spinal irritation is for women. In the suggestion raised by this query, there is a certain truth, for while both sexes do have spinal irritation—pains and weaknesses of the spinal cord with tenderness—yet this peculiar lumbar pain without tenderness, is on the whole, I believe, relatively more common with men than with women.

The next case illustrates the dependence of cerebrasthenia on uterine disorders, and also the value of rest and tonic treatment.

CASE VII.—A married lady, about thirty years of age, consulted me, with a history of cerebrasthenia, combined with a degree of myelasthenia, apparently excited in the first instance by laceration of the cervix, with prolapus uteri. The leading facts of the illness were pain and aching in the head, a certain confusion of ideas at times, dread of receiving or making calls, or of going into society of any kind. There were queer feelings in the head that were not exactly painful, but were much worse than pain, and caused real distress. All these symptoms pointed directly to cerebrasthenia, but they were complicated with a mild degree of spinal weakness, that made it difficult for her to walk to any considerable distance. There was also considerable loss of flesh and increase of pallor, accompanying the neurasthenia, and when I was first consulted in regard to her, she was considerably reduced in weight. She did not go into company, or did not enter public gatherings, and especially was averse to going to church, the place where she was first attacked with some unpleasant feelings in her head. Before coming to the city, she resided in a distant State. I advised preliminary

treatment at home, rest in bed, with tonics and good feeding. Under this regime she improved very decidedly, and in a few weeks came to the city to have treatment carried out more in detail under my own eyes. She had gained very much in flesh, and in all respects was better.

Besides the head symptoms, there was asthenopia, for which I referred her to Dr. Mittendorf, who advised glasses and galvanism. There being a history of uterine disorder, I took her to Dr. Thomas, who examined her and found laceration of the os, for which he treated her with skill and success. I no longer kept the patient in bed, but gave her a liberal supply of food, and kept her reasonably quiet in her room. I ordered every day, general faradization or central galvanization.

She was treated with cod-liver oil and other tonics. After six weeks she returned home still more improved, and from that time to the present has held her own, and is now, and for a long time has been, enabled to go about attending to the care of her family, and mingles much as formerly in society.

In this case cerebrasthenia was the chief factor, although there was a degree of myelasthenia. The chief exciting cause or starting point of the disorder was, without doubt, difficulty of the uterus. The asthenopia was, without doubt, the result, or one of the results, of a nervous causation. Neurasthenic asthenopia is indeed a very common symptom of neurasthenia. In all its forms, very many of these cases are unable to read long, or to work long at objects which require close application, as in sewing, without severe pains in the eyes, and very often pain in the eye excites pain in the head and the face, and indeed over the whole body. In very many cases, though not in all absolutely, this neurasthenic asthenopia seems to be pretty closely depending on some disease, frequently a light disease of the reproductive apparatus. These light disorders of the womb, oftentimes cause more severe disturbances of the nervous system than grave and incurable troubles. In order, however, that these light uterine affections may excite nervous phenomena, it is necessary that they should exist in a nervous constitution. The same diseases in a strong phlegmatic nature would have no general effect.

In the above case the nervous diathesis was decided. If the patient had not been of a nervous constitution, she would never have suffered, and if there had been no disease of the womb, she

would never have suffered. *It was the combination of these two influences, the constitutional and the local, that made her an invalid.*

The relation of the different forms of asthenopia to neurasthenia is very interesting. I have now under observation several cases where asthenopia and neurasthenia are associated. In two of these cases, careful examination by a skilled oculist finds very little objective exploration of the asthenopia. Both of these cases have improved and are constantly improving under general sedatives and tonic treatment, without special reference to the eyes and local electrical applications. In one case there is insufficiency of the internal recti, and under localized galvanization of those muscles the relief is immediate and remarkable; none of these cases have obtained satisfactory relief from glasses.

The following case was one of almost pure myelasthenia, exhaustion of the cord, with tenderness of the vertebra and general hyperæsthesia, and is of special interest as illustrating the value of the rest treatment in combination with electricity and tonics.

CASE VIII.—A young married lady came under my care in the autumn of 1877 for the following group of symptoms:

1. Spinal irritation of a very marked character; the tenderness extending at times the entire length of the spine; at other times confined to the points between the shoulder-blades and the middle lumbar region, and especially the coccyx.

2. Attacks of headache, usually frontal, but sometimes extending all over the head.

3. Feeble appetite and digestion; attacks of nervous dyspepsia.

4. Asthenopia, making it impossible to use the eyes for any considerable time in reading or fine sewing.

5. Poor circulation, with coldness of the extremities.

6. General hyperæsthesia or tenderness of the entire surface of the body, particularly on the bones.

7. Great muscular debility, walking, standing and especially going up stairs very difficult and painful. The pain and aching in the back were always brought on or increased by any physical exertion requiring the use of the lower limbs. In the arms was a similar weakness, so that utter powerlessness followed any strong effort at lifting or carrying.

8. Unusual sensitiveness to vibrations; traveling on the steam cars or even on the horse cars—the easiest of all modes of

locomotion—causing extreme distress. Consequently in going about she was accustomed to take soft pillows or air bags to break the force of the vibrations, but even with all precautions traveling was a source of dread, and she always chose the boat to the cars. Riding in an ordinary carriage was intolerable; a short removal made necessary by a change of the plans of her husband, put her back for a long time, and mainly because she was obliged to ride a short distance in a carriage.

Here was a case of myelasthenia or exhaustion of the cord with the symptoms of spinal irritation, the brain being but slightly affected. The memory was good; the intellect clear; the power for brain work was far in excess of the power for any form of muscular work; and although there was considerable headache, yet it was not accompanied with symptoms of profound brain exhaustion. The backache, the asthenopia, probably, the coldness of the extremities, the muscular debility and inability to stand or walk or to bear the jolting of travel, all point to the spinal cord as the center where the neurasthenia chiefly concentrated itself. For this case various diagnoses would have been given; it would have been called spinal irritation, or anæmia, or the uterus would have been charged with the responsibility of all the symptoms. There was the symptom of spinal irritation; there was anæmia; there was not any sign of uterine disorder to account for the phenomena. Before, as after marriage, the patient had been nervously sensitive; a miscarriage appeared to make her worse in some respects, but introduced no new symptoms. The spinal irritation was very easily relieved by treatment, but that did not greatly relieve the general condition of which the irritation was but one of the many expressions, and the anæmia did not give way to iron.

This case was treated with positive benefit though not absolute cure by a combination of general and central electrization, massage, rest in bed, liberal and varied diet, and various internal medications; ice bags and hot water bags were also used. Her getting out from the bed was very gradual, and after a course of treatment extending over three months she was able to take a long trip to a distant country.

REST AND SECLUSION.—The treatment of certain cases of nervous diseases, functional and organic, by putting the patient in bed and enforcing inactivity for a limited period, is sometimes

one of the best possible means of relief and cure. One of the great benefits that an attack of acute disease, as typhoid fever, confers on a neurasthenic patient, is the absolute rest it compels. Improvement in flesh is very soon seen, and in time there comes also improvement in strength, which, when carefully husbanded and directed, may become a permanent addition to the patient's stock of vitality. The philosophy of this rest treatment is somewhat complex, the rest or abstinence from physical and muscular exertion being only one of the factors that contribute to the excellent results that follow it. As this method of treatment was formerly used, evil as well as good might be accomplished, for the confinement in dark rooms, the low diet, the abstraction of blood with which this rest treatment was often associated, tended to pull down rather than build up the constitution, and in the times of our fathers cases of dyspepsia even were managed in this way with the effect of weakening the already weakened frame. But rest combined with proper nourishment, passive exercise and the judicious and varied employment of sedatives and tonics, especially of electricity, in the modes of general faradization and central galvanization, is, in many cases of myelasthenia, exhaustion of the spine, superior to any other plan of treatment, since it really includes all the best systems of past and personal experience. It is a method that has, however, its difficulties, disadvantages and failures, but in a certain class of nervous diseases, the benefits far over-balance the trouble and sacrifice.

Among the difficulties are the expense, the prejudices and fears and whims of friends, and the apprehension on the part of the patient that confinement is a more burdensome thing than it is really found to be by those who give it a fair trial; but when these preliminaries are satisfactorily arranged and the sufferer has once put herself under treatment, all the rest is comparatively easy; in much shorter time than one would suppose, she becomes accustomed to the restraint; the appetite under the stimulus of electricity, the very best of tonics, and tempting food, is often much better than when in active duties, and in a few days the fat begins to roll up in the face, and subsequently over the body.

One of the practical difficulties, for the solution of which no mathematical rule can be given, is the time required for this rigid confinement, and the method of bringing back the patient

to ordinary life. In this respect, as indeed in all respects, each case must be treated for itself under the guidance of general principles.

The seclusion from friends on which Dr. Mitchell so earnestly insists, I do not always find to be necessary; some of the best possible results I have secured when the patient was under the direct care of relatives and friends. In the use of this, as in the use of all plans and devices for overcoming chronic disease, there can be no routine, cast iron law; each case is a different case from any other, with different symptoms, history, idiosyncrasies, antagonisms and affinities. In deciding the question whether a patient is or is not to be removed from home and friends, the character of the friends themselves is to be considered; if they are unduly emotional, superstitious and demonstrative; if they constantly burden and weary her with oppressive talk and attention, then removal may be indispensable, without which all treatment is thrown away; the constant turning of the patient's mind on the body by conversation, consultation and sympathy in its various modes of expression counterbalancing many fold all possible therapeutic agencies; oil and water are poured on the same fire, a gallon of the one to a gill of the other. When such cases are taken out of these really hostile influences and carried in any direction and kept resolutely apart from those who knew and love and pity them, they are so far delivered from one of the worst possible exciting causes of functional nervous disease, and an opportunity is given for the forces of nature and medication to work together without friction toward recovery. In all forms of disease mental therapeutics is often more useful than any other kind of therapeutics, and this forced seclusion is a powerful and legitimate means of acting on the mind; it compels the patient do what they are far too much disposed to do of themselves, that is remain inactive, and this systematic inactivity in time tends to cure the desire for inactivity; they seek for a change, and long for exertion, while the rest, electricity and tonics give them strength to attempt it.

A great factor in these cases is the therapeutic power of a radically new impression of any kind; hence the real advantage, in some cases, and at certain stages, of a change of doctors, even from a superior to an inferior, or at least a radical revolution in the mode of treatment.

This same question of seclusion—restraint or non-restraint—

comes up in the management of insanity, especially in the early stages of the milder forms of melancholia. In these cases it becomes necessary for the physician on whom the responsibility of the case rests to make a diagnosis of the character of the patient's friends and surroundings before deciding the very important question of restraint or non-restraint. There are cases of which I have seen in my own practice, where the best results, satisfactory both in rapidity and permanence, are secured by treating the patients at home in the midst of her friends who care for her and execute the directions of the physician; and there are cases where speedy removal is the only wise course.

Few things in my professional experience have been more pleasing than the permanent results that I have been enabled to obtain in severe and long standing cases of hysteria, hystero-epilepsy, neurasthenia and allied affections in nervous women when treated at home, or among relatives who were sufficiently sensible to know how to co-operate with the required treatment. I recall in particular an aggravated case of hysteria with convulsions, hallucinations and profound depression, that was taken directly to the residence of a relative and kept there for a number of weeks under electrical and other treatment, until, as a reward of perseverance, she was permanently restored, and to this day remains well and active. This patient was not allowed to see any one but a relative, strangers being systematically excluded whenever they called, and yet a more delightful result could not have been expected from any plan of treatment, and is, I am sure, rarely experienced by those who have to do with cases of this kind.

The main reliance in this case was general faradization and central galvanization, very little local or medical treatment being used. Some years ago I had under care a young lady who was so thoroughly neurasthenic that she could scarcely move about the house, the result mainly of over-work and confinement in a routine occupation. She was treated in the house of a relative, and although the symptoms were unusually obstinate, and a most extraordinary sensitiveness to medicine of nearly all kinds made it impossible to use the leading sedatives and tonics, yet she gradually improved, and last year I saw her as a bride in sufficient health to walk two or three miles and with much increase of flesh.

In both of these cases there was some uterine disease, but not

enough to account in any considerable degree for the symptoms; one was neurasthenic and the other was neurasthenic and hysterical, and both belonged to the class of patients for whom seclusion and forced rest are prescribed.

TRAVELING AS MEDICINE.—The fashionable method of treating all forms of functional nervous disease, is by recommending a trip to Europe. Even where no diagnosis is made, or where the vague expression "general debility" only is used to indicate the morbid condition, this prescription, "a trip to Europe," is indiscriminately ordered.

For years it has been the custom when the patients complained of any or all of these symptoms, that I have described under neurasthenia, to fall back on the recommendation of travel as a panacea, adapted alike to all stages and sexes. If we do not know what is the matter with the patients, we assume that his symptoms are imaginary, or if not imaginary, trifling, and that they require no medicine, no special medical treatment, no careful medical observation, no well directed hygiene even. A long vacation, a protracted absence, is supposed to be a specific for all such conditions. In some cases this prescription does work most excellently; in other cases its results are negative, and in other cases evil, and only evil results are obtained.

I have constantly under my care cases of both forms of neurasthenia, who have spent months and years abroad, under advice of physicians, not only without benefit, but in some instances have been positively injured. Cases of myelasthenia, especially, are very liable to be made worse by the fatigue of travel, by the discomfort of absence from home, by the laborious and oftentimes wearisome and exhausting tasks of sight-seeing. Many are worn out in the picture galleries, and in mountain climbing, and must return home to rest and recover from the effects.

Traveling, indeed, is no more a specific than any other medicine is a specific. Indiscriminately prescribed, especially without making a differential diagnosis of the case, it is unscientific. It is one of the best remedies; it may be one of the worse remedies; it may be a specific for a certain case; it may be precisely the most injurious thing that can be suggested for another case. Almost all medicines are apt to be used indiscriminately. But I doubt whether there is any medicine which is

more indiscriminately used than travel, especially in the form of a trip to Europe. In the cases that are supposed to be nervous prostration, the very best results are oftentimes accomplished in both cerebrasthenia and myelasthenia when the patient remains at home, or near at home, or at least in his own country, with short vacations. And oftentimes there is no need of breaking up business or interfering with the plans of life. Not unfrequently cases of this class progress more satisfactorily when their minds are occupied with their favorite employment, even though sometimes they may be overtasked in it, and become at times over-wearied and excited. In the case of a prominent man that I now recall—cerebrasthenia complicated with myelasthenia—who spent a whole year abroad, and who consulted me on his return, it was found on resuming the topics in which he was especially interested, that he was much better than when idling his time in foreign lands.

ARTICLE XXIII.

THE CURE OF HEMORRHOIDS BY THE HYPODERMIC SYRINGE. By EDMUND ANDREWS A. M., M. D., Prof. of Surgery in the Chicago Medical College.

In a former number of this JOURNAL I published the secret method of certain itinerant "pile doctors," and asked for information from all physicians who had any knowledge of the practical results of the treatment. This request, supplemented by other inquiries, has brought me responses from about 300 physicians, and given me more or less knowledge of the results of over 3,300 cases treated by the new method. From the material thus collected I am able to present the following history:

In the year 1871, there lived in the village of Clinton, Ill., a physician named Mitchell. His practice being small, he employed his superabundant leisure time in planning a new treatment for hemorrhoids. He was a good thinker and soon conceived the idea of charging a hypodermic syringe with equal

parts of carbolic acid and olive oil, and injecting the contents into the hemorrhoidal tumors. He also devised another and totally different plan, which was to take two large needles with triangular points, liked those used by saddlers, and then to pick the piles to pieces, little by little with the needles. Mitchell himself is said to prefer the needle operation, and several others have adopted it from him, but the plan of injections has proved by far the most popular with others, and has recruited a surprising number of operators. The secret was sold from man to man, and the price and the enthusiasm rose simultaneously. "State" and county rights" to practice it were vended at high rates, reaching in one instance, the sum of $3,000. Regular physicians abandoned their practice, and even mortgaged their property for money to buy the secret and set themselves up as itinerants, while ignorant laymen joined in the rush, until they filled the whole West with their clamor, and at last whitened the sands of the Pacific shore with their handbills.

The chief managers of the business settle in the larger towns in the winter, where they advertise and practice; but as spring advances, to the time when the wild geese begin to fly, they feel the migratory instinct and go from place to place, selling the secret to all who will buy it, and operating meanwhile on the people of the farms and villages. In this way they have treated more than 10,000 patients in the States west of the Alleghany Mountains. A secret so extensively sold always gets out. Three years ago I discovered and published it, thus putting a check on the business of selling, and inducing large numbers of the regular profession to try the plan among their patients. These physicians have furnished my best information, but I also opened communication with the principal itinerants themselves and induced several of them to come out frankly and tell what they knew, and by checking one statement against another was able to sift our pretty well the few attempts at deception.

Mitchell's original plans have excited widely extended thought and experimentation among his followers, so that his two methods have branched out into numerous varieties. The original injection seems to have consisted of equal parts of crystalized carbolic acid and olive oil. The operator exposes the piles to view and smears the anus with an ointment to prevent smarting in case the fluid should chance to drip. He then takes a sharp-pointed hypodermic syringe and slowly throws a

few drops into one of the piles. The pipe is left in the puncture a few moments to prevent the fluid from running out, and to allow it to become fixed in the tissue. The pile turns white in the most successful cases and withers away without pain, suppuration or sloughing. Only one pile is treated at a time, and about a week is allowed between the sessions until all are cured. The itinerants often advertise their methods as "painless," but as a matter of fact only about one patient in four gets anything like exemption from pain. Most of them suffer a sharp temporary smarting, and a few have a terrible and prolonged agony. The majority are cured, however, without interrupting their business.

The original plan has sprouted into numerous varieties. Instead of using olive oil as the excipient, many prefer glycerine. Then every operator has his favorite degree of strength. Several claim that the stronger the fluid the better it is, and actually inject crystals of carbolic acid melted by heat, while others use mixtures varying in strength all the way down the scale, until we find Dr. Weirs, of New York, experimenting with one part of acid to twenty or thirty of the solvent. The dose injected varies in like manner. Some advocate great caution and only put in from one to three drops, while others cram the pile with a syringeful and seek to make it suppurate or slough. I find two men using creosote instead of carbolic acid. Several add anodynes, such as morphine, chloral or iodoform. Ergotine is also a favorite injection, and a great number of mixed formulæ have been imparted to me, some of them containing five or six ingredients. Mr. Colles, of Dublin, injects muriated tincture of iron; Dr. Hill, of Bloomington, Ill., and Dr. Drake, of Hastings, Mich., use the iron persulphate, while others have tried tannin, chromic acid, tinct. of iodine, etc. One intelligent itinerant, who writes in a straightforward and manly tone, says he has experimented with almost every coagulating agent in the vegetable and mineral kingdoms, and his preference is for carbolic acid, used as strong as possible. He adds the following remarks: "The difficulty with all remedies except carbolic acid is the suppuration being limited to a small portion of the tumor, or, like the preparation of iron, causing the tumor to swell and become very painful. Carbolic acid is, so to speak, used up in cooking the blood throughout the entire tumor. The appearance of the pile in from five to twenty seconds show such to be the

fact. Suppuration takes place in three or four days with sloughing. No danger of hemorrhage."

The results of these numerous methods of treatment may be summed as follows: In the first place the needle operation has never become a favorite. I can learn of only five persons who employ it. The following case was probably treated in that way: The patient, a plethoric man of 45 years, went to a quack in Chicago, and as a result the varicose hemorrhoidal vein was widely opened. Blood gushed out freely, but after some time was arrested in a manner not clearly understood by him. He then returned home in great agony, and summoned his family physician, by whom I was called in as counsel. Removing sundry cloths and compresses he found a large opening in the vein plugged with a vial cork. The quack, apparently, had torn open the walls of a dilated vein, and, being driven to his wits' end by the gush of blood, finally concluded to cork up his patient like a demijohn.

My informants agree that the injection method seldom fails to cure the disease, but report some serious disasters. The writers know of about 3,304 cases treated in their vicinity by these methods. Although they cannot always give exact numbers and details, yet the circumstances are such, that a case of rapid death from the treatment could not be concealed, while minor troubles, such as pain, sloughing, etc., might frequently escape their notice. Probably the list of deaths is pretty complete, while figures giving the minor accidents are too small.

LIST OF ACCIDENTS.

Deaths	9
Embolism of the liver (suspected)	8
Very dangerous hemorrhage	5
Less dangerous hemorrhage	5
Carbolic acid poisoning (recovered)	1
Sloughing (generally, but not always confined to the piles.)	23
Severe inflammation	10
Violent pain	83
Stricture of the rectum	2
Permanent impotence	1
Long sickness in bed (two weeks to six months.)	6
Relapsed	7
Failed to cure the piles	11
Sundry other accidents	12
Total	183

The cases of sloughing and suppuration of the piles are innumerable. Some itinerants use strong injections with the express purpose of producing these results, deeming that the plan of causing atrophy without suppuration lacks certainty and permanence.

This list shows that while the deaths are so few, that the risk is no greater than in other modes of treating piles, yet the minor accidents are very numerous. The imperfection of the reports renders a thorough study of the accidents impossible, but the following information has been gleaned. One of the deaths was caused by inflammation, followed by immense abscesses, erysipelas and pyæmia. The patient died on the fifth day. Another death apparently resulted from embolism of the liver. That viscus nearly ceased its function; the stools were light-colored and scanty; the skin yellow, and all the lymphatic glands of the groins, axillæ and neck became enlarged. A full dose of calomel always brought temporary benefit, but no permanent improvement. The patient lingered along, and died unrelieved about one hundred days after the operation. The next fatal case was that of a man 84 years of age. The person who injected his pile, said it was "very large and very deeply-seated." It was suspected that he mistook the enlarged prostate for a hemorrhoid. Be that as it may, the patient was attacked with violent pain and retention of urine, and although relieved by the catheter, died on the third day. There is no clear proof that the prostate was injected, or that the result would be fatal if it were.

The fourth death was also attributed to injecting the prostate, but no symptoms were given.

The five remaining deaths are so vaguely reported, that no particulars can be given. It is possible that three of the reports refer to the same patient, in which case the whole number of deaths is only seven. This number of fatal results in 3,304 cases, treated often in the most reckless and ignorant manner, is certainly not large, and tends to show that the injection method is as safe as any other, so far as life is concerned.

The same relative immunity appears respecting hemorrhage. Five dangerous cases of it are reported, but in most, if not all of them, it occurred from the foolhardy practice of allowing the patient to take at once long rides and walks, when he should have been in bed; but even with all this imprudence, the hemorrhagic cases are fewer than are found after the use of the clamp and the

ligature. Allingham reports more instances of hemorrhage after the ligature than I can find among all these cases of injection.

The chief fear of the profession respecting this operation, has been that embolism might occur. The two lower pair of hemorrhoidal veins are small, and send their blood through the iliacs to the heart, but the upper pair is larger, and transmits most of the blood of the hemorrhoidal plexus through the inferior mesenteric vein to the liver; hence, we should expect that the embolism, if it occurred at all, would be of the latter organ. The facts correspond to the suggestions of the anatomy, for not a single case is reported of a sudden death, such as proceeds from clots swept to the heart and lungs, but there are eight instances of suspected embolism of the liver.

Only one of them died, and there was no post mortem examination, so that positive proof is lacking. The first case was the death from hepatic trouble described above; the second was marked by abscess of the liver, but recovered. In the third case there was severe pain in the liver, commencing one hour after the operation. After some time, this was relieved, but the physician feared to repeat the injection. In the remaining cases, it is reported that the injections were followed by the hepatic disease, but no fatal results are included. In a portion of these cases, the liver trouble may have pre-existed as a cause of the piles, rather than a result of the operation. On the whole, it does not appear that there is any decided danger of embolism, if the case be carefully managed. It may be mentioned, that Dr. Whitmire of Metamora, Ill., practices tamponing the upper part of the rectum for twenty-four hours, to prevent the emboli from moving in that direction.

Sloughing and suppuration of the piles generally follows large and concentrated injections, but not the small and dilute ones. A few cases only of extensive abscesses here occurred.

Pain is the most frequent of all accidents; the verge of the anus is extremely sensitive, and injections near that circle are liable to produce fearful distress, but above the verge the sensibility rapidly diminishes, so that much less suffering is entailed by the injection of internal than by external piles. In about one-fourth of the patients, the pain is very slight. Dr. Weirs, of New York, injected two series of cases, one with strong, and the other with weak carbolized solutions, using in the latter only one part of carbolic acid to ten, twenty or thirty of the excipi-

ent. He found that the pain and the abscesses followed the use of the strong injections, but did not occur when weaker ones were employed.

The remaining accidents of the list are not peculiar to this operation, nor greater in number than occur in other methods. If we consider that the operation was a new one, with its conditions of safety unknown, and that many of the operators were ignorant blockheads, with no qualifications for the business but a bottle of carbolic acid and a hypodermic syringe, and with no idea of efficiency except to distend the hemorrhoidal plexus of veins with all the liquid caustic they could get into it, we shall not be surprised at discovering a few deaths and a number of minor accidents. Had the method itself not been an unusually safe one, they would certainly have slaughtered their scores of victims, for the difference is world-wide between their ignorant injecting and cautious scientific surgery.

If the following rules be observed, I believe the method will prove less dangerous than any now in use:

1. Inject only internal piles.

2. Use at first dilute solutions; stronger ones only when these fail.

3. Treat one pile at a time, allowing four to ten days between the operations.

4. Inject from one to six drops, smearing the membrane with cosmoline to protect its surface against dripping.

5. Confine the patient to bed the first day, and subsequently in case any severe symptoms appear. Prohibit any but moderate exercise during the treatment.

Piles are subject to possible hemorrhage under all forms of treatment as well as when left without treatment. In cases where the bleeding vessels cannot be found and promptly controlled, Allingham recommends the following method of using the tampon: He takes a good-sized sponge and fastens to its center a strong double string. (He prefers a bell-shaped sponge inserted with the open end downward). Having pushed the sponge up the rectum some inches beyond the bleeding point, he fills the parts below it with cotton dusted with powdered alum or persulphate of iron, and ties a stick across the finished tampon with the double string. By turning the stick like the handle of a gimlet, he twists and tightens the string, forcing the tampon firmly against the sponge and causing it to spread later-

ally and to compress the bleeding vessels. He advises to put in a large catheter with the tampon to allow the escape of flatus. By the help of opiates the tampon is often tolerated several days.

My final conclusion is that the wild itinerants of the prairies have really made a valuable addition to scientific knowledge, and that the cautious injection of hemorrhoids with carbolized solutions will remain one of the permanent operations of surgery.

The number of physicians who have contributed to this investigation is so large that it is impossible to give separate credit to each one, but I return them collectively my thanks, and especially to Dr. J. Burry, of Raub, Ind., who was kind enough to write to over thirty medical men in my behalf.

The literature of the subject is very scanty, and is mostly covered by the following references:

The *Chicago Med. Jour. and Exam.*, Oct., 1876. Article by Prof. E. Andrews.

The *N. Y. Med. Record*, vol. ix, p. 112.

The *Maryland Med. Jour.*, June, 1878.

The *London Lancet*, p. 229, 1877. Article by H. A. Reeves.

The *Philadelphia Med. and Surg. Rep.*, July 6, 1878.

The *Cincinnati Eclectic Med. Jour.* Three articles 1874, 1877 and in Dec., 1878.

The *Toledo Med. and Surg. Jour.* Article by Prof. J. H. Pooley.

The *Louisville Med. Jour.*, Aug., 1878. Article by J. M. Matthews, M. D.

The *N. Y. Med. Jour.*, March, 1879. Report of Dr. R. F. Weirs to the Therapeutical Society.

The *American Bi-Weekly*, Feb. 17 and April 26, 1878. Two papers read by A. B. Cook, A. M., M. D., and J. M. Matthews, M. D., before the Kentucky State Medical Society.

The *St. Louis Clinical Record*, April, 1878. Article by S. B. Houts, M. D.

Le Journal de Medicine et de Chirurgie, Paris. Tome L. Mars, 1879.

Ashurst's Surgery, second edition, p. 831.

"Hemorrhoids or Piles," etc. A pamphlet with no date, by E. J. Fraser, M. D., San Francisco, Cal.

No. 6 Sixteenth Street.

ARTICLE XXIV.

REMARKS ON THE REPORT OF THE ITALIAN COMMISSIONERS IN LUNACY ON THE MENTAL CONDITION OF PASSANANTE. By JOSEPH WORKMAN. M. D., of Toronto, Canada.

A correspondent of the *Lancet* has furnished that journal with a translation from the Italian of the above document, which was the production of Profs. Tamburini, Buonoma, Tomassi and the Senator Verga. These commissioners were unanimous in their finding, "that the plea of insanity raised in Passanante's behalf is invalid, there being no evidence of *melancholia*, or indeed of any mental disease whatever, in the would-be regicide."

It might be interesting to know what are the branches of science in which the three professors were engaged, and even more so to be informed as to their *practical* knowledge of insanity in its wide range, and under its almost infinitely diversified phases and degress. We are told that Senator Verga is the author of the celebrated monograph on the "Madness of Tasso."

We are very much inclined to presume that the alienistic prestige of the venerable Senator constitutes no trivial proportion of the aggregate qualifications of the commission, for the very difficult and serious task devolved upon them. That a man of superior literary culture, and rich imaginative faculty, may write very attractively, and perhaps very complacently, on the madness of a great poet, potentate, or statesman, and yet have but a very meagre acquaintance with the Protean forms, even of fully developed insanity, and unspeakably less with those penumbral shadings, which, in many cases, long antecede the period of mental eclipse, we may not dispute.

It would be perhaps no less unjust than hazardous to pronounce the finding of the Italian commission erroneous. Their belief in the perfect sanity of Passanante may have been in strict accord with the actuality of his mental condition, and as the hangman has not been called in to ratify their verdict, the culprit may, before shaking off his mortal coil, afford gratifying proof of its justice; but it is not outside the range of possibility,

that his mental culmination may yet but too convincingly demonstrate its fallacy.

The commissioners would appear to have gone through their work in no merely perfunctory manner, and to those who are charmed with a parade of high sounding technicalities, the ornamentation of their deliverance by the sectional titles of *Anthropometry, Psychical Functions, Physiognomy, Function of Relations, Electric Algometry, Functions of Vegetative Life*, fortified by the various other scientific significants, can hardly fail to prove the speculative competency of the psychometric explorers who undertook the inquisition of the mental framework of Passanante. They commenced their work at the summit, and thence glided down gracefully to the nether regions of their *terra incognita*.

They went about the job with all the necessary implements, just as Sternes' critic did when taking the dimensions "of the new book which all the world was making such a rout about;" but they have been more fortunate in their measurements of lengths, breadths and angles than that accomplished bibliometer has been represented by the author of the immortal *Dead Ass*, for they have found the *would-be regicide's* cranial and facial dimensions all O. K. Seeing that they have given us no less than fifteen measurements of these regions, we are quite unwarranted in imagining that they failed in exactitude in this division of their work.

We doubt, however, whether any of the specialty of alienism will derive much useful instruction from the *data* here presented; and it is by no means probable that an expert witness who would enter into such minute details in any court of justice in Europe or America, would escape the ridicule of the entire audience.

Passing, therefore, from this section of the report, let us see what may be presented in its other parts, indicative of reliable mental soundness. We shall reproduce between inverted commas, a series of significant phrases, to which we invite the serious consideration of every reader who has made the study of mental health in both its normal and abnormal conditions, a subject of extended practical investigation, and if he decides that the adduced facts point not more significantly in the direction of insanity than of sanity, we can only say that his interpretation of them does not concur with ours. Be it understood that we use the words "in the *direction* of insanity," with the deliberate object

of admonishing the reader against the conclusion that we regard the case of Passananto's mentality as one of actually or fully developed insanity. We do not, however, hesitate to affirm that the language used by his examiners, if appropriately employed, is unmistakably significant of *germinal* mental alienation. He is represented as a person of "one-sided *ulterior* culture of mind." He is credited with "utopianism of ideas." "Productive activity of ideas normal, or if anything, *uncommon*." "*Rapidity* of perception and judgment notable;" "Promptness and acuteness of his answers; his ideas and the expression of them superior to his condition—often elevated." (Note his condition was that of a *cook*.) "Association of ideas, regular and *rapid*;" attention *keen*, and he passes with equal intensity *from one subject to another*;" clothes his ideas in *imaginative* guise;" is profoundly *convinced of his own ideas*," and he "declares his readiness to *bear witness* to them *with his life*." "Of himself and his own concerns, but little heedful." "*Vanity* rather strong in thinking to have his *amorphous* writings printed."

He says, "where the learned loses himself, the ignorant often comes out triumphant." "Love of parents, and good will towards friends, are in his eyes sacred duties." "The religious sentiment has been *highly* developed in his youth, when he was *fervent* in his religious observances." "Inveighs against vices and abuses." "He excused his crime by saying, "he wanted to avenge the people," and "ideas ought to be *baptized in blood*." "The instincts are feebly developed." "Self-conservation costs him no effort, his speech is ready, easy and *quick*." "Physiognomy rather mild, is often smiling; the look, however, is *sharp*." "From the commencement of a question, he divines the sequel, gives a complacent smile, which sometimes passes into a true *ironical simper*." "His gait is *erect* and *independent*, he reads almost constantly, writes often, and divides into verses, as the Bible;" says "he does not mind death, but would rather *not* pass for a lunatic; what matters life to me, I want my principles to be maintained."

"He often changed masters, but always in order to find a better." "The *mania* of his peculiar ideas does not absorb all, nor at all times, his thoughts; his propensity to put in writing the ideas which frothed up in his brain," etc.

The foregoing are but a limited selection of phrases, scattered over the entire surface of the report, which seem to our mind to

comport very defectively with the decision of the commissioners, that "the plea of insanity raised in Passanante's behalf was invalid." We have *italicized* those words which have seemed to us most significant of mental abnormality. We are convinced there is not an experienced asylum physician in America, who will fail to recognize in the picture drawn by the commissioners, lineaments and colors of mental unsoundness, which he has scores of times beheld, not alone in the early incipiency of insanity, but also in its advanced or fully developed stages. We have had under our own care, in asylum custody, three different times, a young man whose mental attributes and manifestations, both in the intervals between attacks, and in their accession and recession, would square with almost the entire catalogue ascribed to Passanante. He is one of a family of seven—three brothers and four sisters; all of whom, save one of the latter, have been insane.

Of the mental history of Passanante's family, not a word is said. We are half tempted to suspect that the report of the commissioners has been constructed with intentional oracular ambiguity, and that they must now feel pleased to know that King Humbert and his intelligent advisers interpreted it correctly, for the sentence has, by royal command, been commuted to imprisonment for life. We could, both from our asylum experience, and our observance of incubative insanity outside, adduce numerous parallel illustrations of the true mental condition of Passanante, but to the intelligent medical reader, who in his professional round must have had but too many opportunities of noting similar mental lesions and obliquities, no such demonstration can be called for. We shall not, however, be surprised to find even some of our medical periodicals citing with commendation the report of the Passanante commission, for the sole and simple reason that it has appeared in the *London Lancet*. It is much easier to follow in the foot-marks of the distinguished, and more conducive to popular respect, than to go to the trouble of thinking closely and writing justly.

ARTICLE XXV.

CHLORATE OF POTASH. A REMEDY (?) THAT SHOULD NOT BE USED IN ULCERATED OR DIPHTHERITIC THROATS. By THOS. F. RUMBOLD, M. D., of St. Louis.

I am fully aware that in attacking the character of this very popular, almost domestic remedy, that I am running some risk of having my views severely criticised. But the hundreds of instances in which I have observed the effects of this preparation, causes me to not only question its efficacy in any aggravated case of sore throat, i. e., either diphtheric or ulcerated; but to assert that its use is *always* followed by an increase of all the symptoms.

I used this article in 1862 on a child that had a very sore throat; several physicians had said that it was a case of diphtheria. I at once prescribed a saturated solution of chlorate of potassa in cold water. On my visit to the child in about six hours afterward, I observed that its soft palate and tonsils, which, on my first visit, I knew from observation were entirely free from spots, had numerous spots of dirty colored mucous patches. The mother of the child called my attention to this condition of the mucous membrane. At my first visit, as I saw no patches, I greatly doubted the existence of diphtheria, but the observations made at the second visit caused me to change my opinion; of course the chlorate was vigorously pushed. At the next visit, made in about six hours afterward, the child's condition was much worse. The mother informed me that the "clear medicine made Clara cry every time it was placed in her mouth." At this visit I informed her that the child had diphtheria, which was equivalent to sentencing it to death. It died that night.

Next morning I was called to see another child (its mother learning that diphtheria was near her), who had been ill with sore throat, but was recovering. It had been in bed but one day; on the day before my visit, it played around the room most of the time, and laid down only a little more than usual. I examined the mouth and throat carefully, and saw *no spots*. For fear that

it might be diphtheria, I prescribed the popular chlorate of potassa. In the evening of that day its mouth, soft palate and tonsils had quite a number of dirty looking spots on them. The child's fever was much greater, and every symptom was worse. I recommended the continuation of the treatment, and left fearing that I would soon have another death to add to my list. Next morning I called and found my little patient better, much to my delight. There is a sequel to this that I did not then know.

In two or three weeks I was called to see a family in which there were three children taken with diphtheria. My usual constitutional and local treatment, the latter, chlorate of potassa was prescribed. The youngest child died, the next to the youngest came near dying. The oldest, aged about nine years, got along finely. The next youngest not quite so well. Soon after this, the father of this family was taken ill with the same complaint, had a severe chill and high fever following. At his first visit to me, he had no spots on the throat. At the second visit, his throat was much worse. He declared that the "clear medicine (chlorate of potassa sol.) made his throat worse, and he added that he was sure that it made each of his children worse. On my declining to continue the treatment, and desiring him to pay me for what I had done, he swore that I had killed one of his children, and that if the other children had taken the "clear medicine" as regularly as it was given to the youngest, all of them would have died. He left me and went to the houses in which I had patients who had been treated for the same disease.

He made inquiry into the effect that the "clear medicine," had on each of my patients; this lead me also to make a close examination.

The result of investigation proved that the old gentleman was correct, except as to the killing. His oldest child would not take but one teaspoonful, he fought too vigorously for the strength of his mother to compel him to take the "stringy stuff," while those younger than himself, resisted only in proportion to their strength. The grandmother of the child whose death I had expected, would not allow the solution to be given to the little sufferer. This experience made impression enough on me to take away my faith in the efficacy of chlorate of patassa, but not to lead me to think that it was the least injurious.

Since that time, I have on every occasion that chlorate of potassa has been mentioned by physicians, inquired into the

effects of it in their practice. Although a large majority had not thought of questioning its good effects, yet they observed, that it was improved by such agents as carbolic acid, muriate tincture of iron, etc. Many had prescribed it because it was popular, not because they knew it had a beneficial effect. A few had observed that the patients had objected to the solution made with water, on account of the pain it occasioned, and a few had ordered it discontinued, because the patient required stronger remedies, that is, the patient had became worse, but they did not think of ascribing the aggravated symptoms to the effect of the chlorate of potassa.

I am certain that I have had over one-hundred patients tell me that chlorate of potassa had made their throat symptoms much worse. They each were affected with only a slight difficulty in swallowing. After the use of the potash, to their aggravated local symptoms, which rapidly ensued, were added constitutional disturbances of so severe a degree, as to prevent them from following their usual avocation, and compel them to seek the aid of their physician.

I remember to have tried, when in hospital practice, equal parts of chlorate of potass and white sugar, as a preventive of gangrene. I sprinkled the powder on the raw surface of a number of stumps and other wounds. The effect was to produce considerable smarting at the instant of application, and continual dull pain afterward. On opening the wounds on the following morning, I was astonished to find them covered with a dirty colored adhering coat of pus. This I took to be gangrene; it was so pronounced by three visiting physicians. The wounds became more painful, and continued to bear the aspect of hospital gangrene for ten days. Fortunately at this time, I learned that the application of pure nitric acid had the effect to at once arrest gangrene. Although the patients had in these ten days been greatly reduced in flesh and brought almost to death's door, the nitric acid at once cleansed the wounds, as it did afterward in wounds that was not made gangrenous by potash.

I believe that a great many throats are made to take on a gangrenous appearance by the use of chlorate of potassa. I do not say that it is gangrene, but that it resembles it. I also believe that a large number of diphtheritic cases—mild ones of course—will recover if chlorate of potassa is not used, and that no patient, having this disease in a severe form, will recover if it is continuously employed.

Reports on the Recent Progress of Medicine.

GYNÆCOLOGY.

ARLICLE XXVI.

By W. L. BARRET, M. D.

1. Intra-Uterine Fibroids—J. Marion Sims, *New York Med. Jour.*, 1874.

2. Treatment and Removal of Fibroids from the Uterus by Traction—Thomas Addis Emmet, M. D., Surgeon to the Woman's Hospital of the State of New York.

3. A New Method of Removing Interstitial Fibroids of the Uterus—T. Gaylord Thomas, *Archives of Medicine.*

4. On the Value of Subcutaneous Injections of Ergotin in Uterine Fibroids and in Chronic Hypertrophy of the Uterus—Leopold, *Archiv für Gynäkologie.*Bd. xiii. s. 182. *Monthly Abstract of Med. Science*, Mar., 1879.

5. Treatment of Fibroid Tumors of the Uterus by Ergotin Suppositories—Rob't. Bell, M. D., F. F. P., S. G. Phys. to the Glasgow Institution for the Diseases of Women and Children. *London Lancet*, March 15, 1879.

6. Source of Nutrition or Vascular Supply of Uterine Fibroids and the Mode in which Ergot acts upon these growths—Byford's Address to the American Medical Association, 1875.

7. Squibb's formula for the preparation of the Solid Extract of Ergot for Hypodermic Use—E. B. Stephens, M. D., *Obstet. Gazette*, April, 1879.

8. A Case of Spaying for Fibroid Tumor of the Womb—Wm. Goodell, A. M., M. D., Prof. of Clinical Gynæcology in the University of Penn—*Am. Jour. of Med. Sciences*, July, 1878.

9. On the Treatment of Uterine Fibroids with Galvanism by Profound Puncture. Illustrated by fifty cases in the practice of Gilman Kimball, M. D., of Lowell, and Ephraim Cutter, M. D., of Cambridge, Mass. Reported by E. Cutter, M. D., *Am. Jour. of Med. Sciences*, July, 1878.

10. Report of Eight Cases of Extirpation of the Uterus—T. Wood, M. D., *Cincinnati Lancet and Clinic*, March, 1869.

11. Removal of Uterine Fibroids by Inversion of the Uterus—L. Chas. Boisliniere, M. D., St. Louis.

12. Spaying of Women. A Note, Historical and Philological—J. H. Aveling, *Obstetric Journal* of Great Britain and Ireland, Jan., 1879.

13. The progress of Laparo-elytrotomy—R. P. Harris, M. D., *Obstetrical Gazette*, March, 1879.

14. Quinia in Chronic Irritation of the Bladder—Knowls Thornton, *London Lancet*, Jan. 1st, 1868. *Philadelphia Med. Times.*

Dr. Sims says in this original and instructive essay, that fibroids are almost always capsuled. That the subserous variety

are, as a rule, not amenable to surgical treatment (but intimates at the close of the paper, that his views on this subject were somewhat modified after its completion.) That operative measures are not justifiable in a majority of mucous and submucous tumors. When, however, these two latter varieties are attended with exhaustive hemorrhage, then we are warranted in attacking them surgically. If there be no excessive hemorrhage, it is wiser and better for the patient to accept her condition as one of infirmity and make the best of it. Fibroids, when comparatively small, give rise to bearable discomfort by pressure on the pelvic organs; when large enough to rise out of the pelvis, this inconvenience ceases; they are at no time *per se* dangerous. He recites six successful cases of enucleation of submucous fibroids, one case in which operative measures were abandoned because of the supervention of inflammatory trouble excited by the preliminary dilatation of the cervix, and three cases in which death followed enucleation. In two of the fatal cases, death was caused by septicæmia, and in one by uræmia, kidney disease not having been suspected when the operation was undertaken. The patient is put into the best possible condition for the operation by the administration of tonics, the hemorrhage, in this interval, being controlled by the internal use of ergot, and if neccesary the iron tampon is called into requisition. The pre-requisites for the attempted removal are the free opening of the cervix and the release of the tumor from its investing capsule. If the os be not open and the tumor presenting, dilatation is effected with tents or by incising the os. If necessary the os is both dilated and incised. The tumor is freed from its investing capsule by a long and free incision, generally made in its most accessible and dependent portion. Should hemorrhage follow, it is checked by tamponing the uterine cavity with iron cotton, which is prepared by saturating jeweler's cotton in a mixture of two parts of water and one part of the liq. ferri subsulphatis. After saturation, the cotton is squeezed almost dry. The best method of introducing the uterine tampon, is to take a piece of whalebone, twelve inches long, tapered to a point, smoothly polished, and curved to the uterine axis. After greasing the whalebone, it is wrapped with iron cotton until a tampon of sufficient size to fill the uterus has been made. The outer surface of the tampon is then greased, to facilitate its introduction. It is shoved into the uterus, slipped off of the whalebone with

dressing forceps, and secured in position by a vaginal tampon The uterine tampon may be left in position for from twenty-four to thirty-six hours. When the capsule has been incised, he expects the tumor to come slowly down and gradually dilate the cervix. Its enucleation should not be attempted till we feel pretty sure that the cervix is nearly sufficiently dilated for it to pass; and not then, till the rounded end of the tumor presents on a level with the borders of the dilated os. If we attempt to enucleate with the lower border of the tumor above the os internum, failure will be the inevitable result, that is, if the tumor be large. When the tumor is small, say the size of a nut or an egg, these rules do not apply. For operation, the patient is placed in Sims' position, his speculum introduced, the presenting portion of the tumor seized with a strong vulsellum and pulled forward. The capsule is opened with a knife or with the scissors, at the point of its attachment to the cervix. No attempt must be made to dissect, but the cut must be made squarely into the tumor. Through this opening the finger is passed, and the capsule then divided all round in close proximity to the borders of the cervix. When the finger cannot reach high enough, it is supplemented with the aid of an enucleator. The enucleator is a blunt hook, bent at right angles to the shaft, and twelve or thirteen inches long. It is represented in the accompanying cut (Fig. 1.) While the tumor is firmly held with the vulsellum, the enucleator is rapidly pushed up between the

Fig. 2.

Fig. 1.

tumor and its capsules, until the enucleation is completed. Its evulsion is assisted by passing up between the tumor and the uterine wall the tumor hook, represented in Fig. 2. This instrument gives an immense leverage, and wonderfully assists in evulsing and rolling the tumor out of its bed. Removal being completed, ragged shreds of the capsule remaining adherent to the uterus are trimmed off with the scissors, and the cavity plugged with iron cotton to protect against hemorrhage. Bleeding is generally trifling, but in some instances severe. After removal of the uterine tampon, the uterus is daily, and often several times a day, washed out with carbolized water. The intra-uterine washing is continued until suppuration ceases. The effects of these irrigations in preventing septicæmia were striking, and are referred to as notable examples by Dr. John T. Hodgen, in his very able report on Antiseptic Surgery, read before the Surgical Section of the International Medical Congress, September, 1876.

2. Dr. Emmet believes that fibroids are only pedunculated when so located that gravitation comes into play, and that this force is the source of irritation that excites muscular contraction. From some change of structure, due to the long-continued presence of the tumor, the fibers forming the outer wall of the uterus that cover these growths, lose to a great extent their contractile power. In corroboration, it has been noted that when energetic uterine contraction takes place, there is a sinking-in of the subperitoneal surface corresponding in extent to the area of the tumor beneath it, and that this depression is decreased in proportion as the tumor is projected into the cavity. The muscular fibers on the circumference of the tumor, because of their proximity to the source of irritation, contract most powerfully, and thus form a contractile band that fills up the space left vacant by the advancing tumor. He has felt the depression of the peritoneal surface distinctly, but is not certain whether real displacement of the neutral space occurs, or whether displacement is simulated by the formation of a ridge corresponding to the circumference of the tumor by the actively contracting fibers in that locality. He inclines to the latter opinion. When tumors are situated at or near the fundus, pedunculation may be hastened by ergot. This is the accepted practice, and we may aid the action of the ergot by dilatation or incision of the cervix, but when not favorably situated for the action of gravity, uterine contraction is ineffectual. In these lat-

ter cases it is his practice to rely upon traction, keeping it up until the tumor is crowded out of its bed by the contraction of the adjacent uterine fibers.

The following case illustrates Emmet's method of operating: "In 1863 a patient was admitted to the Woman's Hospital with a fibrous tumor, distending the uterus to the size of full term; a portion of it filled the vagina and had already commenced to slough. He could form no idea of its attachment by digital examination. He applied a pair of forceps with the view of delivering the mass until he could reach the base, around which he intended to have applied the chain of an écraseur. His efforts, however, were fruitless, as the tumor was too large to enter the pelvis. Fearing to leave the patient in this condition he passed, with the aid of Gouch's canula, a stout twine around the mass, as high up as he could within the uterine cavity. To the end of the cord he made a slip-knot and strangulated the mass to control the hemorrhage which he anticipated. Steady traction was made on the cord by an assistant for fear that hemorrhage would occur should the noose become relaxed. He proceeded to remove the mass, piece by piece, with the aid of a large tenaculum and a pair of curved scissors. After he had taken away a large portion, he was surprised that the vagina continued to be occupied by about the same sized mass as at the beginning. But he was so much occupied with the work immediately before him, that he did not notice the gradual decrease in the size of the uterus until near the close of the operation. As he advanced, the cord was cut by accident. There was no bleeding, so he introduced his hand within the vagina and proceeded with the operation by pulling down with the tenaculum, portion after portion, until the pedicle was reached. He thus removed the whole of the tumor with scarcely the loss of an ounce of blood, after the traction had commenced. He noted that the blanched appearance of the mass, after cutting the cord, was identical with that presented by the strangulated portion, after the blood it contained had escaped, before the cord was severed. It surprised him, too; that the pedicle of such a mass should be no larger than his index finger. Previous to the operation he had supposed the greater portion of the mass buried within the uterine tissues. At the termination of the operation the uterine canal was barely five inches in length. The mass contained a number of cysts of various sizes. The quantity of fluid that escaped

could not be estimated; but the pieces of the tumor removed weighed together nearly seven pounds. The patient recovered without a bad symptom."

From this time he has seldom used the écraseur but removed with the scissors any growth within the uterine canal which he could reach. He has had no fear of hemorrhage, for this case taught him it could be controlled in the manner described. Dr. Emmet goes on to say:

"The practical bearing is obvious that, in addition to the risk from blood-poisoning, the practice is not a safe one to remove, as is frequently done, a projecting mass within the cavity without any knowledge as to its depth within the uterine tissue. When we can make traction it matters little how thin the outer wall of the uterus may be, provided we are able to excite the muscular tissue to contraction, since the space will be closed up as rapidly as the mass is withdrawn. This will surely be the case where we have a single tumor, especially if it be situated near the fundus, or even in the lateral wall, if its size be not so large as to have replaced the greater portion of the true uterine tissue. There is certainly a limit to the procedure, but it is safer and is applicable in every case where a prudent operator would feel justifiable in attempting enucleation by any method. I deprecate the practice of separating the tumor from its capsule before withdrawing it, where muscular action is not excited, or to so limited an extent that a large cavity is left from which the patient is exposed to the danger of blood-poisoning, if she does not sink from the loss of blood beforehand.

It is even more hazardous to cut into the mass or excite inflammation within the structure, by the use of the cautery or other agents, with the view of bringing about disintegration; for no man possesses the means of limiting, to the tumor, the inflammatory process which he will establish by this mode of treatment. Where the sloughing has stopped short of breaking down with the tumor the outer uterine wall covering it, the progress has been stayed in every instance by a special interposition of Providence. Were we as familiar with the death record as we are with the the result where the treatment has been survived, no conscientious man would ever attempt to destroy a uterine tumor by disintegration.

A few words in relation to the after treatment. When the tumor has been removed, and all shreds or loose portions within

reach, it is important to wash out the cavity thoroughly. It is best to use very hot water; for not only is it a prompt excitor of uterine action, but by prolonging the injection we thoroughly empty the capillaries within reach of its direct influence. After the injection we possess no better means of increasing the contraction, and of maintaining this condition, than by the free application of Churchill's strong tincture of iodine. Should there be any oozing of blood after the hot-water injection, the application of iodine is certain to arrest it, without there exists some impediment to the proper contraction of the uterus. It is an agent I have employed for this purpose more than ten years, and it is also a most valuable antiseptic. I am confident that we possess no better means as a prophylactic, when used as I have employed it.

Under no consideration would I introduce the persulphate of iron into a cavity to arrest hemorrhage. It possesses in itself no styptic properties, and only coagulates a mass of blood, which then acts mechanically. The blood is so destroyed in character by contact with the persulphate that it undergoes decomposition within a few hours. From this source the patient frequently becomes blood-poisoned before any septic element has been germinated elsewhere. It acts as a local irritant, and it is impossible to get rid of it until removed by suppuration. After injecting the iodine I sometimes pack in a little cotton saturated with glycerine. If more than this is needed, it is better to use damp cotton which has been saturated with a strong solution of alum and tampon the vagina with the same material. On the second day I carefully remove the cotton; if there is no bleeding after washing out the cavity, I dispense with all dressings. It is necessary to devote the utmost care to cleanliness by frequent injections of warm water. To these injections may be added a little brewer's yeast as a stimulant and disinfectant, or carbolic acid, if there is any tissue undergoing decomposition. Finally I keep the patient in bed until the cavity has filled up, if a tumor has been enucleated, or until all discharge ceases from the uterine canal, if a polypus has been removed.

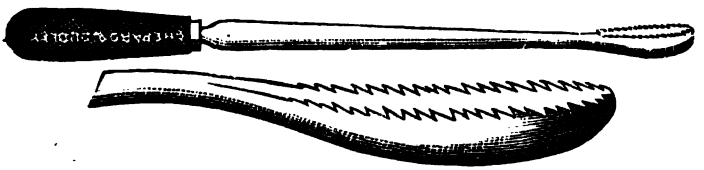
My experience in this mode of operating would recommend it on the score of safety. I have not lost a single patient, after the removal of growths from the uterus, in over eight years, during which time I have regularly employed this method. The only case during this period in which I deviated from my prac-

tice, by cutting into the growth and leaving it to break down, died. The details of the case I have already presented. I must state, however, that I have never enucleated so large a fibrous tumor before as the case I have presented, for I have not been favorably impressed with the results following the usual methods of operating which have passed under my own observation in the practice of others; but I have safely removed a number of small fibroids, where death has frequently occurred under other circumstances. I have also operated many times by traction in pedunculating tumors which have begun to project from the canal. Formerly when I have operated under like circumstances I have lost patients from blood-poisoning, in the breaking down of the portions left behind, embedded in the uterine wall. It has been my practice when the growth was larger than a pigeon's egg, to confine my efforts entirely to controlling the hemorrhage and aiding the action of the uterus in forcing the tumor from its bed towards the canal. When it projected sufficiently, I then removed it by traction. I have always been very conservative in my views regarding any surgical interference with large fibrous tumors involving a greater portion of the uterine wall. While I am likely still to hold these views my recent experience may lead me to extend the field of operative interference to a larger number of this class of cases than formerly."

3. Dr. Thomas says: the enucleation of these tumors is attended by the great dangers of septicæmia, peritonitis, hemorrhage and exhaustion. But it must be borne in mind that while heroic interference is environed by risks, a Fabian course, a policy of waiting, watching and inactivity, is by no means always safe. The growing tumor creates exhausting hemorrhage, dangerous mental depression and anxiety, and disturbs the functions of nutrition and excretion, thus slowly dragging the patients down to death. The dangers attending ligation are so great that every conscientious surgeon is averse to this method, and although the boldness of the plan recommended by Atlee may appall the timid, it is now pretty generally appreciated that in apparent temerity there is safety, not to be found in measures ostensibly milder. The plans usually adopted to extirpate fibroids may be thus summarized: 1st. Excision. 2d. Torsion. 3d. Avulsion. 4th. Ecrasment. 5th. Enucleation. 6th. The production of sloughing. These measures, superior to ligation, are yet deficient and

objectionable. Excision and torsion are only applicable to pedunculated growths, and the former method, even then, is often impossible. Avulsion and enucleation are difficult and exhausting. Ecrasment often fails to remove the entire growth, and leaves the stump to decompose and cause septicæmia. Removal by establishing the sloughing process, so certainly begets septicæmia, that this method is unwarrantable. Instead of courting, the surgeons should fear and shun sloughing by all possible means. The great objection to ergot for the expulsion of large submucous growths, is that the contracting fibers of the uterus impair the nutrition of the neoplasms so completely as to produce death and decomposition. He then proposes a plan which he says he regards as superior to any yet suggested: "This consists in seizing the tumor at its most dependent and accessible point with a strong vulsellum forceps and passing along its border a spoon-saw, or serrated scoop (figured in the accompanying diagram) and by a gentle pendulum motion from side

[Fig. 3.]



to side, sawing through the attachments of the tumor and freeing it entirely from its connections with the uterus." The spoon-saw or serrated scoop consists of a steel spoon with a strong handle, twelve or thirteen inches long. "The spoon itself is slightly convex on its outer, and concave on its inner surface, while its borders are serrated. The saw teeth are not blunt and not slanted in either direction, but perpendicular. The convex surface protects the uterine wall entirely, while the inner and concave causes the instrument to hug the tumor and run along its surface, as it cuts its way laterally and upwards." The advantages claimed are: 1st, Diminution of hemorrhage. 2d, Perfect adaptation of the instruments to the contour of the tumor. 3d, Facility in reaching all parts of the tumor. 4th, Rapidity of action and the certainty of perfect enucleation. A number of difficult cases are related by Dr. Thomas, in which enucleation was rapidly and safely effected with the aid of this

instrument. (The Doctor's practical experience with it confirms the favorable opinion of its utility that is suggested by its mechanical construction; but aside from the serrated spoon, we fail to detect anything novel in the communication, and the "New method of removing submucous and interstitial fibroids of the uterus," is rather a modification of methods that are old.)

4. "Leopold supports Hilderbrandt, Winkle, Wernich, etc., against the late Prof. Mastin, of Berlin, and others, maintaining that ergot so employed is of great value in the treatment of uterine fibroids, and he has employed the same agent with success in treatment of sub-involution and chronic metritis. He says success greatly depends on the mode of employment, the continuation of the treatment, the selection of cases, and especially the preparations employed. He thinks failure due to neglect of these precautions. According to the author, the form of fibroid that gives the best result is the interstitial, though hemorrhage may be lessened and expulsion promoted in the submucous variety. Unsuitable cases in which to employ ergot, are those in which the uterus is incapable of contracting because of false membranes binding it down; when it contains a fattily degenerated or calcareous tumor; when its muscular fibers are atrophic, or its blood vessels degenerated. Tumors of the body are more benefitted than those of the neck. Great care is observed in selecting for treatment cases of sub-involution or chronic metritis. Cases in which there is pelvic exudation and those in which uterine polypi exist are excluded. The preparation Leopold recommends is Wernich's extract dissolved in four parts of distilled water. After trial he has found that the addition of glycerine, morphia, salicylic acid and carbolic acid is objectionable. The solution should be frequently renewed, as it soon gets mouldy. The situation selected is at the side of the navel The canula should be inserted deeply into the abdominal wall, the injection to be made slowly; a cold compress is immediately applied, and the patient should lie on her back for several hours afterward. Daily injections should be made and the treatment continued from 30 to 120 days. They should be kept up during the menstrual period. With diminution of the bleeding, the interval between the injections may be lengthened. Leopold records twelve cases in which he employed ergotin injections. In three there was no improvement, in five there was notable de

crease of the tumor. So he concludes that 75 per cent gave evidence of improvement. He also gives results obtained in fourteen cases of hypertrophy of the uterus. Eight cases are classed as sub-involution, five as inflammation or metritis, and one as exfoliative endometritis (dysmenorrhœa membranacea). The chief effect observed was diminution of the menorrhagia. The duration of the treatment varied from six weeks to several months. If improvement does not take place after fifty or sixty injections, Leopold thinks it is useless to continue the treatment. In the majority of his patients the general health was greatly benefitted by the treatment. Sections of fibrous tumors from patients treated by this method demonstrated that their vascular supply had been greatly diminished; they were anæmic, and fatty degeneration of their muscular elements had commenced.

5. The author after acknowledging the beneficial results to be obtained from the subcutaneous injection of ergotine in uterine fibroids, objects to its employment in this manner on the score of the abscesses it produces, and the pain attending its employment in that manner. In his experience, the insertion of the ergotine solution into the muscular structure, does not obviate abscess. He uses ergotine in four grain doses, made into suppositories and introduced into the rectum. One suppository is used each night. After enumerating several cases, which he says were greatly benefitted by this treatment, he insists on the absolute necessity of the greatest care in the selection of the drug used, and adds that many of the preparations in the market are absolutely worthless. (Dr. T. A. Emmet in the article already quoted, recommends the introduction of suppositories of the extract of ergot into the uterine cavity, and this strikes us as the most efficient method of using it. The preparation that has given us the greatest satisfaction, is Squibb's solid aqueous extract).

6. The source of the nutrition or the vascular supply of fibroids, is through many small channels at various points on their periphery, and not as in ovarian tumors, from one great artery. Hence their somewhat definite period of vitality, and the ease with which nutrition may be disturbed. Both ergot and belladonna act upon the uterine wall in a three-fold manner, and cause a decrease in the supply of blood, both to the healthy and morbid structures of the uterus. 1. The caliber of the arteries

is diminished by the contraction of the muscular coats of the vessels. 2. The arteries are diminished in size by the compression of the uterine fibers surrounding them. 3. The uterine vessels are disturbed and drawn in diverse directions, by both the contraction and compression of the uterine wall, and are thereby rendered less fit for sanguineous conduits.

7. Dissolve 200 grains of the extract of ergot in 250 minims of water by stirring; filter the solution through paper, and make up to 300 minims by washing the residue on the filter with a little water. Each minim of this solution represents grains iv of ergot in powder. Of this solution, from 10 to 20 minims are injected daily, or once in two days.

8. In this case, with the view of lessening periodic congestion of the womb, and thus decreasing the nutrition of the tumor, Dr. Goodell extracted both ovaries through the vagina. His patient, an unmarried lady, æt 33, suffered at the monthlies with an excruciating pain in the left ovarian region, which she described as twisting, bursting, rending. The pain began a week before, and lasted through the period, which continued for one week, and was profuse. During the week following the menses, it abated somewhat. She spent three weeks of each month in bed. The uterus was three inches in depth. The tumor filled the pelvis and reached two finger breadths above the navel. It was sub-peritoneal. The operation relieved all the aches and pains that had embittered her menstrual life. At the end of seven months from the date of the spaying, she had not passed a single day in bed since convalescence from the operation, and only by the most careful examination could a slight fibroid enlargement of the womb be detected. Dr. Trenholm, of Montreal, has operated once, Prof. Hegar, of Freiburg, twice; and Prof. Nussbaum, of Munich, once in similar cases. These cases, with that of Dr. Goodell, make five cases in all, in which removal of the ovaries has been resorted to to palliate the distressing pain and exhausting hemorrhage sometimes caused by uterine fibroids. In all of these instances, the operation has been pronounced a success.

9. In 1871 the author began treating uterine fibroids with galvanism by profound puncture, hoping thereby to arrest their growth. Of fifty cases so treated, in seven instances the growth

was not arrested, four died; in thirty-two the growth was arrested; three cases were relieved and four were cured.

10. Dr. Wood reports eight cases in which he extirpated the uterus; amputated it through the neck, as close to the vaginal junction as possible, without opening into the vaginal canal, for the purpose of removing fibroids connected with that organ. He says, that if the tables of Pozzi are examined, it will be found that the largest number of cases he reports were only gastrotomy, with partial operations on the uterus, and in many of them the uterus was not touched with the knife. They should not, therefore, be counted either for or against hysteriotomy. Of Pozzi's 119 cases, the smallest number were complete operations; the balance were partial as applied to the uterine body. Analysis shows that the partial are more fatal than the complete operations, and this confirms the opinion that experience has long since forced upon Dr. Wood. Of the eight cases reported by Dr. Wood, five recovered, and three died. The Doctor operates by making an incision in the abdomen in the mesian line sufficiently extensive to admit of the removal of the tumor. The uterus containing the tumor is raised from its position and supported by assistants, while ligatures are applied to the ovarian vessels on each side, and the lateral attachments of the uterus are dissected down to the vaginal junction. A needle is passed through the neck of the uterus, armed with a strong, double silk ligature; the ligature is then tied, the neck cut off and the tumor removed. The ends of the ligatures are brought out at the lower end of the abdominal wound, and the subsequent dressing is the same as in ovariotomy.

11. Prof. Boisliniere reported a case to the St. Louis Obstetrical Society, in which he delivered a submucous fibroid attached to the fundus, with a pair of narrow-bladed forceps. The tumor was dragged into the vagina, investing the womb as it was drawn down. The chain of an ecraseur was then placed around the pedicle and its connection severed. The inverted womb was easily reduced, and the patient made a rapid recovery. The tumor, which was exhibited to the society, was as large as a very large orange, and its pedicle was about an inch and a-half in diameter. This is the first instance of this practice that has come to the notice of the reporter.

12. Dr. Aveling shows that this operation has been performed for many centuries by Eastern nations from motives social, æsthetic and religious, and that it may be traced back to remote periods by reference to the "Satyræ Medicæ" of George Frank de Franckenau, 1822. The first section of the second "Satyra" contains the pith of what is known upon the subject up to the time of his writing—the chapter "De Castrandis Mulieribus" in the book of Père Theophile Raymond, entitled "Eunuchi nati, facti, mystice," 1865, and the little treatise, "De Castratione Mulierium," by Georgius Francus, 1673, etc.," contain information in reference to its bibliography.

He says that James Blundell first proposed the extirpation of the ovaries as a remedial measure, at a meeting of the Royal Medical and Chirurgical Society, held in London, June 23, 1823, in a communication entitled "A Contribution of Experiments and Observations on Injuries of the Belly, considered in their relation to Abdominal Surgery. In a small volume published by Blundell two years later, entitled "Researches Physiological and Pathological," at page 26 may be found the following remarkable paragraph: *The extirpation of the healthy ovaries.* This operation, even granting it to be safe, can scarcely in any instance be necessary, though it may be observed by the way, that it would probably be found an effectual remedy in the worst cases of dysmenorrhœa, and in bleeding from the monthly determination on the inverted womb, where extirpation of the organ was rejected. The author accords to Hegar, priority in the performance of the operation, and to Battey priority only of publication. It thus appears that Battey is stripped of originality of conception, and was even forestalled in the performance of the operation.

13. The Ritgen operation, as improved by Thomas, of New York, has now been performed seven times, with four deaths, viz.: twice in New York; three times in Brooklyn; once in Sheffield, England, and once in London. Dr. Thomas saved one woman; Dr. Steve two; and Dr. Thomas W. Hine, and Dr. Arthur W. Edis, each lost theirs, but saved the children. Six of the seven children were alive at delivery; one died in an hour, and one in eighteen days. In four of the seven operations the bladder was torn in dilating the vaginal opening, either in the lacerations by fingers or the removal of the fœtus. The

operations have required from twenty to thirty-five minutes for their performance; and it is said that at least four assistants, and, better, five, should be present to aid the operator.

The operation has not by any means been tested as yet, and it is impossible to draw a comparison between it and the Cæsarean section, at this stage of progress. The first seven Cæsarean operations in the United States (four not published by the operators), saved four women and four children, which is a better result than from the new operation thus far. Laparo-elytrotomy would appear to be less dangerous in cases of long delay than the Cæsarean operation; not because the abdominal cavity is unopened, but because the uterus is not wounded, which would appear in cases of prolonged labor to constitute the chief element of success in the subperitoneal section. It is not to be expected that the new method will save moribund subjects, or women in the last stage of cancerous disease, as were two of the seven under this form of operation. When twenty women have endured the new operation, it will be time enough to calculate the advantages and disadvantages of it. At present we are inclined to favor the old method, and to rob it of its chief danger by a very early use of the knife. If delay has already occurred through ignorance, the new operation should be preferred, as less dangerous under the circumstances; but in an early case, we believe the Cæsarean section to be preferable on many grounds. It is more simple, takes much less time, requires much less surgical skill, fewer assistants, and more simple implements, and can be performed with the instruments of a pocket-case, as it has been, on two occasions, in country practice in the United States. We believe that each method will be found to have its advantages and disadvantages, and that circumstances should determine which form should have the preference in a given case.

14. Mr. Thornton relates the history of three patients who after ovariotomy were troubled with fever and severe dysurea, and whose urine contained much mucus, was ammoniacal and offensive. Three ounces of a solution of quinine, two grains to an ounce of water, with a few drops of diluted sulphuric acid to dissolve, were thrown into the bladder. After a few minutes two ounces were withdrawn, and the rest allowed to remain until voided by the patient, she being instructed to refrain from passing it for an hour if possible. The relief in each case was prompt and perfect.

ARTICLE XXVII.

DISEASES OF THE RESPIRATORY ORGANS.

BY WM. PORTER, M. D.

1. The Larynx in Cases of Leprosy—Elsberg, N. Y. Med. Record, Jan. 4th, 1869.
2. Diphtheria—Resumé.
3. Laryngeal Paralysis—Lefferts, N. Y. Med. Jour., Jan., 1879.
4. Diseases of the Bronchial Glands—Quain, Brit. Med. Jour., Dec. 14th, 1878.
5. Syphilitic Laryngitis—Krishaber, London Med. Record, Jan. 15th, 1879.
6. Function of the Epiglottis—Walton, Journal of Physiology, Sept., 1879.
7. Syphilis of the Epiglottis—Klemm, Chl. für Chir. 1879, p. 368.
8. Resection of Rib in Empyema—Lutz, Notes.
9. Acute Miliary Tuberculosis—Litten, Med. Times and Gaz., 1879.

1. Dr. Elsberg, to whom we are indebted for the accompanying illustrations, in a clinical lecture at Charity Hospital describes two of these rare cases. In the first—a Cuban boy, æt 19—there were characteristic premonitory symptoms experienced four years ago, and large tuberous masses have since been developed, first in the skin of the forehead, and afterwards on the lower portions of the face. There are a few white scars on the body, and the surface of the extremities is scaly, and there are several points of ulceration. During the last year there has been a gradual change in his voice, which, from being a high tenor, is now masked and muffled. All the portions of the mouth and throat, rich in connective tissues, are involved. The tongue is large, swollen and fissured; the uvula is long, and the surface made uneven by several small tubers. The palate and pharynx have escaped thus far. The laryngoscope (Fig. 1,) revealed a large, thick, unsymmetrical epiglottis. The upper aperture of the larynx has become irregular and smaller; the ary-epiglottic folds are tumefied and studded sparingly with small tubers. The ventricular folds present the same appearance, and so cover the vocal cords, that only the inner edges of the latter can be seen. The

mucous membrane over the arytenoid cartilages is swollen, and presents two large tubers—one on each side. The parts move slowly when phonation is attempted.

Fig. 1.

The second case was that of a man, æt 45, native of New York, who had, however, lived in Cuba for three years. Here the disease seems to be progressing more rapidly, and is further developed than in the other. In addition to the features before noted, the pharynx and palate are involved, the latter ulcerated. The

Fig. 2.

laryngeal mucous membrane (Fig 2) is thickened and covered with large masses, as also the ary-epiglottic and ventricular folds. In the intra-arytenoid space a large tuber stands out prominently.

The larygneal disease occurs secondarily to the cutaneous, but soon assumes great prominence. The diseases which produce similar appearances are lupus, syphilis and phthisis, but the clinical history and the cutaneous and other manifestations make a differential diagnosis a matter of no great difficulty. The intense vascular injection is absent in phthisis. Dr. Elsberg prefers to avoid the term tubercle, which has come to be identified with phthisis, when designating the lumps or tubers of leprosy. The prognosis is always unfavorable.

2. A remarkable feature of diphtheria, says the *Lancet*, is the

curious manner in which it sometimes springs up in a certain locality, becomes epidemic and virulent, affecting a large proportion of the population; at other times apparently endemic, it is limited to certain houses to which it clings tenaciously, but with little tendency to spread. In the majority of the inquiries with reference to limited outbreaks, the presence of foul health conditions, such as bad water supply, absence of drainage or soaking of sewerage from privies into wells, has been detected. As in the case of enteric fever, decomposing sewerage has been believed to be capable, under certain conditions, of generating diphtheria. It is true that diphtheria and enteric fever are close neighbors in a cycle of diseases, but the evidence is not yet sufficient to convince scientists that diphtheria is even in a minority of cases, diffused through water supply or sewer gas, and far less is the evidence conclusive that putrescent sewerage can originate it. It has been apparently proved by the investigation of one localized outbreak, that the milk supply was the means of conveying the disease, as there seemed to be no possibility of contagion having been introduced from an antecedent case. An not unnatural hypothesis, therefore, would be that either some disease primarily affecting bovine animals is capable of being transmitted to man, in whom it takes the form of diphtheria, or on the other hand, that diphtheria may be transmitted through the cow which it affects but slightly, or in another form. We should have in the latter case the converse of small-pox, in that small-pox transmitted through the cow becomes mild, whilst diphtheria similarly transmitted, becomes more malignant. Many outbreaks of enteric fever are now traced to milk supply, and it is a field for inquiry, whether diphtheria, which has some points of relationship to the former, may not be developed from the same source. An attempt to prove this hypothesis was made by Mr. Powers (before the London Pathological Society, Jan. 1879), who suggests a diseased condition of the udders of the cow, known as garget, influencing the quality of the milk in such a manner as to produce diphtheria in those who use it. This is a more plausable theory than that ascribing the propagation of diphtheria to defective sewerage, for we have, from time to time, reports of severe epidemics throughout the country, for instance in the mountain villages of the Alleghanies, where sewers do not exist. But a few months ago, a contributor to a foreign exchange declared that the potato was the exciting cause of diphtheria, and each month brings new—

sometimes *very original*—ideas regarding the etiology of this formidable disease. None of these inventions are proven as yet, though certainly it seems as though the relation of contaminated milk to diphtheria is worthy of investigation.

The medical literature of to-day teems with formulæ for, and the history of wonderful cures in diphtheria, but little or nothing new has been added during the last few months. Valuable contributions have, however, been made to this department. (Mackenzie, Reiter, Chapman, Gill, Davis, Smith and others), and from these we glean; 1st. That recuperative (tonic) agents should be used freely and early in the disease. 2d. That so called specific treatment is valueless. 3d. That antiseptic remedies—chlorate of potassium, salicylic acid, and the different compounds of carbolic acid, still find favor in the treatment of secondary poisoning. 4th. That harsh and destructive local treatment is to be avoided, the preference being given to such applications as lime water, or solutions of carbolic acid or chlorinated soda.

Alcohol in full and free doses has been urged in by Dr. Chapman, and this has been sanctioned by good authority, while Reiter, believing that the dangerous element in diphtheria is not a poison, but an excess of fibrine in the blood, seems to have had great success in the use of calomel. He gives calomel boldly every hour, until the intestinal discharges are gelatinous and of a dark green hue, and has never seen ptyalism follow. In the case of a babe eight months old, 3½ grains of calomel every hour for 68 hours, seemed to be responsible for the cure which followed. The reporter has followed this treatment in three severe cases, and these confirmed the observations of Dr. Reiter, but the record of many cases is yet needed to substantiate this promising departure from established rule.

In passing, we may remark that the theory which regards croup as a form of diphtheria, is gaining ground. Those who have had the best opportunities for studying the disease, are outspoken on this point. Hillier, 1862, Semple, 1872, George Johnston, 1870, Jenner, 1875, Traube, 1872, Mackenzie 1863, etc. To such as would know the latest, and probably most convincing argument in favor of the identity of the two diseases, we commend the recent work of the last named author. (American Edition, Lindsay & Blakiston. 1879.)

3. Lefferts has published two interesting cases of bilateral

paralysis of the dilator muscles of the glottis (crico-arytænoidei postici) in both of which recovery occurred. The first a woman, æt. 40, who had previously suffered from secondary and tertiary syphilis. In April, 1876, she began to suffer from continually increasing dyspnœa, and on May 7th had two severe attacks of laryngeal spasm; inspiration was difficult and attended with stridor; expiration was noiseless and easy. On laryngoscopic examination a narrow slit was seen between the vocal cords, gaping slightly during expiration and disappearing on forced inspiration. The sensibility of the laryngeal mucous membrane was undiminished. The patient made a good recovery under anti-spyhilitic treatment. The second case was in all respects parallel to the first. Lefferts concludes that in the absence of any corroborative evidence of specific lesion in the nerve centers, he must regard the paralysis of the muscles as due to some direct and local effect of the syphilitic virus.

4. Dr. Quain has analyzed the records of sixty cases in which the bronchial glands were diseased. The pathological conditions to which these structures are liable are congestion, acute and chronic inflammation, tuberculosis, scrofulous and syphilitic disease. The glands are affected more often in the female after puberty. Besides the various cachexiæ, the exciting causes are the structures which contain the afferent lymphatic vessels, as bronchitis, pleurisy and pneumonia. The enlarged glands pressing on the recurrent laryngeal nerve may excite cough. The symptoms, in order of frequency, are cough, which is generally dry; pain felt near the fourth and fifth dorsal vertebræ, with tenderness on pressure often accompanying it; dyspnœa with dysphagia and hæmoptysis. Aphonia and vomiting occurred in a few cases; congestion and puffiness of the face due to pressure on the venous trunks was often present. Among the physical symptoms, are dullness in the interscapular region, and often bronchial respiration; loud expiratory murmur and increased vocal resonance. The treatment which is directed to the cause is often effective. [In 1874 Lereboullet made deductions which the above confirm throughout. He used successfully in such cases iodine, arsenic and belladonna. Raymond (1874), believes that enlargements of the lymphatics of the lung (*angiolucites pulmonum*) followed frequently cancer of the stomach. Bronchial adenopathy develops during an attack of whooping-cough (Guèn-

eau de Mussy, 1875,) and measles (Eustace Smith, 1875). Sometimes on physical exploration, a mass of enlarged glands may be detected near the bifurcation, behind the lower part of the manubrium].

5. The following conclusions, drawn by Krishaber (*Gaz. Hebdomadaire*, Nos. 45, 46, 47, 1878,) from a long series of most instructive cases, which are set forth, after a truly excellent clinical lecture on the etiology, the pathology, the dangers, and the treatment of the respiratory troubles in the different stages of syphilis: 1. The syphilitic laryngostenoses show themselves at the most varying periods after infection. 2. Their late appearance is not always, but most frequently, a proof of the presence of an advanced stage of syphilis. 3. The lesions which produce laryngostenosis in syphilis are different, according to the sudden or slow appearance of respiratory troubles. 4. The sudden narrowing is almost always due to œdema, which accompanies the different specific manifestations; the slow narrowing is most frequently the consequence of a hypertrophic or luxuriant inflammation; sometimes it is due to cicatricial narrowing, and least frequently to the formation of an osseous tumor. 5. The respiratory accidents are the graver, the closer the causating lesions are found to the tracheal region. Tracheal lesions themselves are most frequently fatal. 6. The slow form of syphilitic laryngostenosis may be complicated by œdema and suddenly take an acute course. This complication, however, is not frequent. 7. The acute form of syphilitic laryngostenosis may be successfully and quickly fought by specific treatment, and surgical intervention may be avoided in case of apparently imminent asphyxia. 8. The specific treatment must exhibit from the beginning very high doses, and must be continued in gradually diminishing intensity, even after the cessation of the respiratory troubles, in order to avoid recurrences. 9. The slow form gives way to the treatment the more reluctantly, the more insidious and prolonged has been its invasion. 10. The slow narrowing is arrested sometimes spontaneously, and tracheotomy is then not called for; this narrowing, however, never undergoes spontaneous retrogressive metamorphosis. 11. If there be, in consequence of cicatricial narrowing, any tendency to obliteration of the larynx, this will take place, whatever might be done; the opening of the air passages, and the uninterrupted wearing of

the canula, are imperiously demanded in this case. 12. The results of the mechanical dilation of the larynx have not yet recieved their consecration by time. 13. The syphilitic vegetation of the larynx may be destroyed or removed like other non-specific laryngeal growths. 14. The differential diagnosis between simple and syphilitic vegetations is rather easy; but there are difficulties regarding the differential diagnosis of syphilitic, tuberculous, and carcinomatous neoplasms. 15. In all forms of syphilitic stenosis, cough is rare, and pain little marked. 16. The conservation of the voice is compatible with the gravity of the evil. 17. Except in cases of growth, the local treatment of syphilitic laryngostenosis is useless. 18. In the overwhelming majority of cases, the choice of treatment is to be made between specific medication and tracheotomy (or laryngotomy). In certain cases both methods will find their employment.

6. In this interesting article, it is shown that the epiglottis is not essential to deglutition, even of liquid, but that it is an important agent in the modification of the voice. Experiments and pathological cases in support of these views are cited. [This is worthy of notice, as it indicates the justice of surgical interference where there is malignant or other formidable disease of the epiglottis. It is a matter of record, that the epiglottis can be removed in the human subject, either partially or entirely, though fortunately the necessity for such procedure seldom arises.]

7. Klemm believes this form of syphilis is not so rare as is supposed. In the early stages, the epiglottis is red, swollen and ulcerated around the border. The tendency is either to chronic thickening or to ulceration, the latter being more frequent. The process may last for years and involve the glottis. After a time, certain characteristic contractions may form in the epiglottis, which is at no time very painful to the touch, and in this respect differs from tubercular disease. Carcinoma and tuberculosis (and lupus,) are alone to be distinguished from syphilis of the epiglottis, and here outside and general manifestations are valuable, as the local distinctions cannot always be made out.

8. By request, Dr. Lutz has furnished the following suggestive notes for our report, from a case in practice: "K., æt 40, a common laborer, was taken sick with pneumonia of the right lung about the middle of February, for which I treated him.

Nothing worthy of notice occurred during the progress of the disease; the lung passed through the different transformations, and on the 23d of February, I made my last visit, leaving with him a prescription for a tonic. On the 16th of March, I was again summoned to see him. He was sitting up in a rocking chair; complained of slight cough, but more particularly of great dyspnœa and palpitation of the heart. About five days before, he said he felt a pinching pain in the left side and had considerable fever and cough. On making a physical examination, all of his garments having been removed, I found that the left side of the chest was perfectly immobile, the intercostal spaces bulging, the apex beat of the heart visible in the epigastric region, and the vocal fremitus entirely absent. Percussion elicited dullness up to the second intercostal space. Auscultation showed the respiratory sound absent over the affected side, except in the apex of the left lung, there was heard anteriorly bronchial respiration; whereas, on the healthy side, the respiratory sound was decidedly exaggerated. Besides this, there was a tumor with sloping borders covering the fourth and fifth intercostal spaces, and painful on palpation. Empyema was diagnosed and aspirations proposed, as a means of at least temporary relief, to which the patient consented next day; March 17th, I drew off two quarts of yellowish, creamy, odorless pus, the needle of the aspirator having been inserted in the 8th intercostal space on a line let fall from the middle of the axilla; the patient was greatly relieved, of course. It was found, however, that in spite of all the remedies usually administered to promote absorption, the cavity refilled to about the same extent in a week, when I again drew off 1½ quarts of pus; in another week it again became necessary to evacuate two quarts. Both my patient and I were now satisfied that more heroic measures were indicated, and I proposed to him to resect a rib, which would give us a patulous opening through which the cavity could be washed out with antiseptics. Accordingly on last Saturday, April 5th, the patient was chloroformed, an incision made over the ninth rib, and a piece an inch and a half was removed. Through it about 1½ quarts of pus escaped. The piece was taken out at the lateral border of the infra-mammary region. Of course the wound was kept aseptic. I have since washed out the cavity twice daily with a two per cent solution of carbolic acid. After the opening had been made, I could by means of a reflected light see the left lung pressed against the

spinal column. On the morning of April 6th, the patient had a slight chill, and the temperature rose to 101°. Since then he has steadily progressed; the pleural cavity discharges less pus every day, the respiratory sounds are returning, the patient has a good appetite, is gaining flesh and sleeps well."

9. The diagnosis of miliary tuberculosis must depend on a consideration of all the phenomena present, and not on any one symptom. Irregular fever, high from the outset, and accompanied early with bronchitis and cough, considerable increase in respiratory frequency, with cyanosis, rapid wasting and a loss of strength, and perhaps an eruption of herpes on the lips, would favor the idea of its existence, especially in a person with old disease of the apices of the lungs. If no roseola appears at the end of the first week, and diarrhœa, meteorismus and ileo-cæcal tenderness are absent, the probabilities are still more in favor of acute tuberculosis, and still later, the absence of bed sores, so frequent in typhoid, would further strengthen the diagnosis. Dr. Litten calls attention to the occasional difficulty of distinguishing between diffuse bronchitis in elderly persons with emphysema, and miliary tuberculosis in early stages. The chief difference is the abundance of the physical symptoms of catarrh (râles) and of the sputa, early met with in diffuse bronchitis. Miliary tuberculosis runs its course in two to eight weeks. The prognosis is almost absolutely fatal. Therapeutic measures can only be directed to reducing the fever and alleviating the bronchial catarrh.

Translations from the French.

EXTRAORDINARY HYPERTROPHY OF THE MAMMÆ IN A GIRL AGED 16, REMAINING STATIONARY FOR EIGHT YEARS. VERY NOTABLE SPONTANEOUS ATROPHY AFTER MARRIAGE, AND MANY PREGNANCIES.

[Translated for the JOURNAL from the proceedings of the Academy of Sciences, of Montpellier. Section of Medicine. By S. POLLAK, M. D., Surgeon to the Eye and Ear Infirmary of the St. Louis Hospital.]

There are extraordinary morbid growths or monstrosities recorded in the annals of medicine, as pathological curiosities, whose etiology is unknown, whose progress is a departure from ordinary laws, and on which therapeutics remained powerless. They are given as mere facts. We recognize that their observations are ordinarily without profit to us.

But this case of mammary hypertrophy is rather an exception, the complete history of which leads to very instructive conclusions; it will furnish new proofs of the astonishing resources of nature, and will command from us under all circumstances a prudent reserve in the diagnosis and treatment.

Prof. Benoit presented to the Academy in 1860, a girl aged 16 years and five months, who had two enormously hypertrophied mammæ. While sitting, she supports them with her lap; while standing, they cause curving of the vertebral column, and displacement of the scapulæ.

This hypertrophy commenced eighteen months ago, and has already attained extraordinary proportions. The circumference of the right breast is 94 centimetres, that of the left breast 1 metre, .05 centm. The pedicle of the right breast is 67 centm., that of the left breast, 69 centm. in circumference. The right breast extends 8 centm. below the umbilicus, and the left breast 13 centm. Mere vestiges of nipples are found laterally. The cutaneous sacs containing the tumors take the same direction, at the expense of the interior and posterior parts.

This is a hypertrophy, not of one, but of all the elements of

the mammæ. The glandular substance, considerably enlarged and patulous, is disseminated in a soft adipose elastic tissue, and can be easily palpated. The vascular system has acquired great development. Prof. Benoit established the relation that exists between the development of these tumors, and the disturbance of the respiratory and even digestive functions. The whole body must necessarily suffer from the vicious direction taken by the nutritive forces.

The removal of the mammæ by ablation, was decided on in consultation, but not consented to by the patient. It was not urged, on account of her extreme debility and great emaciation. A plaster cast was taken of her breast, and deposited in the museum of the faculty of medicine. She returned home. *This was in 1860.*

In 1876, Dr Monteils her physician, in giving the sequel, writes: This case, so simple in its beginning, so surprising in its development, is still more astonishing in its termination. This strange morbid affection of which she conserves, and ever will conserve indellible traces, is a magnificient specimen of the *vis medicatrix naturæ*, such as I have often seen in the mountains of Lozère, among those who were obstinately rebellious to surgical treatment.

Permit me to begin *ab novo*, in order to elucidate some etiological peculiarties, which my inquiries elicited, and which should be known.

Rosine M., born 1st December, 1844, at the foot of Mount Lozère, in a country where lymphatic, goiterous and scrofulous temperaments predominate. Her childhood was normal. At the age of 15, she had not menstruated, although this is the age that girls of this country do so. Nevertheless, though slightly lymphatic, she was considered strong enough to go in service in the village of Gajan, where the women are in the habit, as is the custom in all southern departments, to stand waist deep in the river when washing clothes.

In 1859, one day when Rosine felt very unwell, she perceived the first menstrual molimen while washing clothes in the river, she following the example of her companions. She always ascribed her great infirmity to that immersion. I have known her from infancy, attended her on many occasions. I made dilligent inquiries after all possible causes. I have charged her of having used, as is occasionally done here, some herbaceous

plants, by the friction of which a rapid growth of the breast is provoked. She denied this positively and persisted in her first belief. It is certain, that during her sojourn in Gajan, and from the moment that she stood in the water, notwithstanding her feeble state of health, her breasts continued to grow. The increase of volume of both breasts was so rapid, that she left her employers and returned to her family.

When Rosine M. consulted me in 1860, the mammæ had already attained unheard of proportions. They had an amplitude of a true Puncinella in front, and she could not venture going out. The weight of these abnormal masses of adipose and glandular tissue, had a deleterious effect upon her constitution, by fatiguing the anterior and posterior muscles of the trunk, in compressing the chest, to the manifest injury of the regular function of the lungs, and yet the climax of their development had not been reached.

I at once instituted an energetic atrophic treatment, by the internal and external use of the various preparations of iodine, and though persisted in for six months, they only retarded, but did not arrest the growth. A few isolated small abscesses would occasionally be seen, which gave exit to fetid, bad pus. Her health rapidly grew worse, the chest became deformed, a general degeneration was threatening. I proposed ablation, which was refused. Then only, I advised her to go to Montpellier, where she was exhibited to the Academy of Medicine, and her condition described as above.

On her return home, she became seriously sick, had a pulmonary catarrh, which she credited to the plaster of Paris cast which was taken of her breast while in Montpellier. She, however, recovered from this attack, and experienced no inconvenience from it. For the consecutive eight years, she retained this infirmity. Her menses reappeared in 1862, though sparingly, yet regularly.

At last she found a husband, who was willing to care for her in spite of her repulsive appearance. She was married on the 5th of June, 1869, and from that moment her breast commenced appreciably to diminish in volume. Since then, she gave birth to three children, a girl in May, 1870, a boy in February, 1872, a second son in Sept., 1875, and is now advanced seven months in pregnancy. The child born in 1875 died at three months, the other children are healthy and strong. She nursed none of her

children, there being no milk in the breasts, though there was considerable turgescence during gestation, which made them appear larger, for the time being.

Rosine is now 32 years old, she has almost entirely lost her former appearance, and looks when dressed, like any other woman with large breasts. She is now a robust woman, an excellent housekeeper, and attends to three other families besides her own. She had no other ailing, except a slight deafness.

The following are the measurements of the breast at present:

	METRES.
Horizontal circumference of the middle of the right breast	0.27
Horizontal circumference of the middle of the left breast	0.33
Vertical circumference of right breast	0.35
Vertical circumference of left breast	0.40
Circumference of right pedicle	0.32
Circumference of left pedicle	0.34

They yet reach within 3 and 5 centimetres the level of the umbilicus.

In the unpregnated state, these organs resemble a flabby, wrinkled mass of skin, traversed by enormously dilated varicose vessels, covering the almost atrophied mammæ, and disseminated through a mass of loose, thick adipose tissue, which can be easily retained in place by a corset.

The only inconvenience which they present, and which are yet considerable, are their hideous appearance on account of their flabbiness, and the intense, sebaceous repulsive fetor emanating therefrom.

Cases of extraordinary development of the mammæ without malignant degeneration are not rare. Labarraque has collated in a monograph 33 cases, among which that of Rosine occupies the first rank, but what renders her's exceptionably remarkable, was the favorable termination, which had not been foreseen. None could expect that a girl of 16, who was delicate, anæmic, borne down by the weight of breasts of monstrous exuberance, could not only resist the withering and wasting effect of this growth, but could become a mother, and under the happy influence of maternity, experience a notable diminution of the formidable deformity.

It is impossible to misconstrue the effect of marriage and its consequences in favor of the resolution of mammary tumors. This case so carefully detailed by Dr. Monteils, leaves no doubt on that score. There was a change in the direction of the in-

flammatory process, and the mammæ have ceased to be the predominant point of nutritive action. This fact is the much more remarkable, from the very opposite phenomena which characterize the general rule. It is during and after pregnancy, that the breasts perfect their glandular structure, and reach the term of ascending evolution. With the cessation of the excitement produced by pregnancy and lactation, the mammæ diminish in volume; they are usually at the menopause when uterine life becomes extinct; they commence a retrograde metamorphosis which distinguishes the atrophy of the essential anatomical elements of the mammary glands. Only the atrophied excretory ducts are left, interspersed with fibrous tracts, and surrounded with areolar-adipose tissue.

The question now arises: Was this a true general hypertrophy of the breasts? Have the fundamental elements of these organs augmented in number and in volume? True hypertrophy of the glands is yet a mooted subject. Labarraque maintains this position, and cites others to maintain him in it. While Labbé and Cayne, in their excellent work on tumors of the breasts, range it to the side of *diffuse fibroma* of Virchow.

According to Virchow, the starting point of the morbid proofs and the seat of the lesion of a diffuse fibroma, lies particularly in the connective and interlobular tissue.

In consequence of its situation in the midst of a tissue, whose nutritive activity has become considerable, which presents a rapid growth, it often occurs that the glandular *culs-de-sac* participate in this hyperplastic work. The acini enlarge in every direction; the cubic epithelium which lines them, tumefies and becomes more abundant than in the normal state. At other times, the glandular elements seem to remain absolutely indifferent to the hyperplasia which goes on around it, and the epithelium appears to preserve its form and nature. This variety alone is, according to Birkett, the true hypertrophy of the mammæ.

We are, of course, unable to furnish histological proofs for our diagnosis of these tumors, but we believe that to the proliferated connective tissue of diffuse fibroma, infiltrated with fat cells, which constitute the greatest bulk, is added the hypertrophy of the galactophorous conduits and of the acini. On the surface, and in a certain depth, loose clusters of glands can be felt, which alone would form a larger mass than the normal

mammæ. Allowance must also be made for glandular ramification, buried in the tumor, which escape the touch. The want of lacteal secretion after accouchment cannot be accepted as an objection, for the hypertrophic alteration of the acini, and of their epithelium is precisely incompatible with the regular function of that organ.

We found no tumefaction in the adjacent region, nor any enlargement of the lymphatic ganglions. This is indeed charactreistic of benign tumors. Their weight and bulk disturb the function. They absorb the nutritive resources, and are liable to erysipelas, suppuration and ulceration, but their consecutive alterations have nothing in common with malignant tumors.

The development of these tumors is slow and continuous, but it is not rare to see them increase by oscillation or by successive growth.

In many tumors, says Broca, the growth is without limit, almost indefinite. At other times, they remain stationary after having attained a certain volume, and nutrition is going on in them as in healthy organs. It is not often that tumors, after existing some time without change of volume, diminish either spontaneously, or after treatment, and this process of resolution can end in complete resorption of the accidental tissue. This happy solution is never seen in cancer, in chondroma, but occasionally in glandular hypertrophy and adenoma. The resolution of tumors is comparable to atrophy of physiological tissue. It is owing to the predominance of the decomposition over the composition of the anatomical elements in the nutritive process.

In the present case, marriage and pregnancy have interrupted in favor of decomposition, the equilibrium which seemed to have been established in these immeasurably enlarged breasts, stationary so many years, and have brought about a new condition in their existence, when their nutrition became of minor importance.

This result is so much more notable, as it is in opposition to generally observed and admitted facts.

It is well known that pregnancy certainly influences the development of the breast. Joerdens and others insist that hypertrophy begins with every pregnancy, and diminishes in the intervals. In this case, if the menstrual derangement took part in the etiology of the hypertrophy, it would be difficult to deny the influence of marriage and pregnancy upon the atrophy.

Sir Astley Cooper has met with similar cases, for he regards celibacy a predisposing cause of mammary hypertrophy; he even advises marriage. Has not Prof. Velpeau indicated conjugal union as the proper treatment?

The observation of this case, proves how much our *a priori* reasoning can be controverted by facts, for we are at best ignorant of the many hidden resources of nature. Surely, none would have advised marriage in such a monstrosity. But she desired it, and most marvelous, she found a husband, and the result legitimizes her conduct; for, from the moment that her sexual functions were brought into active exercise, her condition improved.

Proceedings of Medical Societies.

LEWIS COUNTY MEDICAL SOCIETY.

The Lewis County Medical Society met at Monticello, Mo., April 21st, 1879, Dr. R. S. Briscoe, of Lewistown, President, in the chair. Fifteen members were present.

Reading of the minutes was dispensed with, they having been published in the ST. LOUIS MEDICAL AND SURGICAL JOURNAL.

Drs. C. P. Vincent, Steffinsville; J. E. Hope, Lewistown, and A. J. Magee, Tolona, were elected to membership.

A reading of the Code of Ethics of the American Medical Association and the By-Laws of this society were called for and read.

Dr. R. J. Christie, of Monticello, presented W. R——, a case of chronic pneumonia, which presented some very interesting and unusual features, and gave the history and treatment.

This case elicited a very general discussion on pneumonia.

Dr. W. S. D. Johnson, of LaBelle, presented Robt. E——, the case of hypertrophy of the heart, which was before the Society in February.

The case was examined by Dr. Christie, whose remarks were very interesting and instructive.

Dr. W. S. D. Johnson presented Mr. S——, a case of hypochondriasis, with great lack of nerve force, the pulse often falling as low as 30 to 40 per minute. He presented a son of Mr. S—— also, a case of synovitis with anchylosis of the knee-joint.

Dr. Christie, presented a child of W. B——,a case of talipus equino-varus, and gave a history of the case under treatment after the plan of Barwell and Sayre, and to hasten the cure proceeded to divide the tendo achilles, and retain the foot in position with adhesive straps.

Dr. J. R. Lucas gave the history of a case of puerperal eclampsia, in which he gave a more heroic treatment than in the case reported at the February meeting. In this case, after the first convulsions, he gave 30 drops of Norwood's tinct. veratrum viride; in half an hour gave 35 drops, and another spasm coming on soon after, he gave a teaspoonful of the veratram viride, which effectually quieted the spasms, and *did not* produce any alarming symptoms, and she made a good recovery.

This case elicited a general discussion of the toxic properties of veratrum viride.

Dr. Lucas said Stelle, after giving the symptoms of an excessive dose, says: "Alarming and apparently dangerous as these symptoms are, it does not appear that they have terminated in death."

Dr. J. W. Hawkins, of Canton, said that he had good success with Dover's powders and ice to the head.

Dr. Lucas gave the history of the case of Mr. T——, aged 75, with pneumonia, in which he had three relapses. After some unusual exertion he was taken suddenly with great dyspnœa, tumultuous and cardiac distress, etc. He diagnosed heart-clot. Ammonia was administered freely, and in a few hours the thrombosis was dissolved, and the patient made a good recovery.

Dr. R. C. Risk was elected a delegate to the State Medical Association with Dr. J. R. Lucas as alternate.

This being the annual election of officers resulted in the election of the following:

President—Dr. R. S. Briscoe, of Lewistown.

Vice-President—Dr. J. W. Hawkins, Canton.

Secretary—Dr. R. C. Risk, Williamstown.

The following resolutions were adopted.

Resolved, That we deem it the duty of every regular physician in the county to become a member of this Society; to aid in its deliberations for the education and elevation of the profession; to lend his counsel and experience for the general good; and to those who may refuse, and prefer to put their light under a bushel, will not be called or met in consultation after the regular meeting in June.

Resolved, That the thanks of this Society are due, and are hereby tendered to the ST. LOUIS MEDICAL AND SURGICAL JOUR-

NAL for publishing the proceedings of this Society, and we hope Dr. Rumbold may still extend this favor.

Moved that the Secretary be instructed to furnish the ST. LOUIS MED. AND SURG. JOURNAL and the *St. Louis Courier of Medicine* with a copy of the proceedings for publication.

Moved to adjourn to meet at Monticello on June 16th, 1879.

Dr. R. S. BRISCOE, President.

R. C. RISK, Secretary.

DIRTRICT MEDICAL SOCIETY OF NORTHWEST MISSOURI.

The fourth annual meeting of the District Medical Society of Northwest Missouri was held in St. Joseph, April 10th.

The Society was called to order at 10 A. M. The President, Dr. Catlett being absent, Vice-President Dr. Trevor presided, Dr. J. P. Chesney acting Secretary pro tem, Dr. Geiger, the Secretary, being also absent.

On the roll being called, the following members answered: Drs. Bryant, Goslin, Wilson, McAdow, Hoffman, Simmons, Heddens, Trevor, Donelan, Siemans, Doyle, Geiger, France, Chesney, Richmond, Bergoff, Busey, Knight, Smith, Christopher, Craig, Leigh, Brownlee, Williamson, Kearney and Farr.

The committe on the programme of exercise, reported as follows: Afternoon session—1st, Election of officers; 2d, essay by Dr. C. J. Siemans; 3d, Voluntary contributions, oral or written. Night session—1st, Essay, by Dr. D. J. Christopher; 2d, Discussion of the regular subject, viz: "What are the most suitable remedies to improve appetite, digestion and assimilation; 3d, Reports of cases.

Dr. A. McMichael, of Rockport, Mo., petitioned the society for membership; he is recommended by Drs. Bryant and Chamberlain. The petition was referred to the Committe on Elections who reported favorably, and the Doctor was then balloted for and elected a member.

AFTERNOON SESSION—The Society convened at 2 o'clock, Vice President Dr. Trevor in the chair; Dr. Geiger, Secretary.

Dr. Richmond introduced Dr. Tuttle, of Hamilton, Mo., a member of the Grand River Medical Society, who was welcomed by the Chair.

Under the regular order of business, the following gentlemen were elected as officers for the year: President, Dr. A. Goslin; Oregon, Mo., First Vice President, Dr. E. A. Donelan, St. Joseph, Mo.; Recording Secretary, Dr. D. J. Christopher, St. Joseph, Mo.; Corresponding Secretary, Dr. J. M. D. France, St. Joseph, Mo.; Treasurer, Dr. T. H. Doyle, St. Joseph, Mo.; Librarian, Dr. F. A. Simmons, St. Joseph, Mo.

A valedictory address was read by the Secretary, from Dr. Catlett, the retiring President.

Dr. Hoffman presented to the Society a perfect specimen of an anencephalus fœtus. Dr. Simmons made some interesting remarks on the specimen, and reported a similar case that occured in his practice.

Dr. Heddens read a voluntary paper on hemorrhage from the impregnated and unimpregnated uterus, which was discussed by Drs. Doyle, Bryant, Leigh snd Simmons.

EVENING SESSION—The Society met at 7½ P. M., President Dr. Goslin in the chair, Dr. Christopher, Secretary.

Dr. Christopher read a paper on irritability of muscular fiber, which was received. The regular subject was taken up and discussed by Dr. Simmons, Heddens, Richmond, Doyle, Goslin, France and Donelan.

Dr. Leigh reported a case of amputation of the arm in which he used the antiseptic spray of Lister. The ligature come away on the eighth day, the stump healed in sixteen days. Dr. Bergoff reported a very interesting case of fracture of the ankle joint. Quite an interesting case was reported by Dr. Busey of inflammation of the middle ear, followed by hemiplegia, on which remarks were made by Drs. Doyle, Leigh and Goslin. Dr. Hoffman reported a case of generating wound of the great toe followed by gangrene. Amputation was resorted to, and in a short time an abscess made its appearance in the opposite foot. Dr. Craig made some very interesting remarks on the case.

After the appointment of the standing committees, the Society adjourned to meet July 10th, 1879.

ABINGDON ACADEMY OF MEDICINE.

The Abingdon Academy of Medicine, held its regular annual meeting at Abingdon, Va., at the office of Dr. H. M. Grant, Dr. J. S. Apperson, President, in the chair.

The following gentleman were elected officers for the ensuing year:

President—Dr. W. F. Barr.

1st Vice-President—Dr. Geo. E. Wiley.

2d Vice-President—Dr. T. D. Kernan.

Cor. Secretary—Dr. R. J. Preston.

Rec. Secretary and Treasurer—Dr. H. M. Grant.

The following gentleman were unanimously elected Honorary Fellows of the Academy of Medicine: Drs. J. S. D. Cullen, R. T. Coleman, Richmond, Va.; J. H. Claiborne, Petersburg, Va., A. M. Fauntleroy, Staunton, Va.; S. M. Bemiss, New Or-

leans, La.; H. F. Campbell, Agusta, Ga.; J. J. Chisholm, Baltimore, Md.; W. N. Vance, Bristol, Tenn.

Dr. Apperson reported a very interesting and anomalous case in practice, that elicited a long and instructive discussion. Dr. Barr reported cases of sciatica which he had cured.

The fellows then engaged in the discussion of rheumatism, the subject selected at the previous meeting for discussion. Drs. Wiley, Apperson, Preston and Barr each entertained the Society with appropriate remarks on the subject, and it proved to be as interesting and instructive a meeting as has been held for many months.

Periscope of Current Medical and Scientific Literature.

MATERIA MEDICA.

NITRATE OF AMYL IN INFANTILE CONVULSIONS.—In a case reported by Dr. Engel, this agent was successfully used. The parents had lost three children previously by epileptiform convulsions of the same character as those affecting the present case. The child, eighteen months old, has continued in convulsions for five hours, and was apparently moribund, when as a last resort five drops of the amyl were given along with ½ gr. of morphia. The child at once went off into a quiet sleep.—*Phil. Med. Times. Medical Record.*

SULPHO-THYMATE OF QUINIA.—Signor Cozzolino recommends the *sulpho-thymate of quinia*—a compound of sulphuric and thymic (thymol) acid and quinia—as worthy of ranking beside the sulphocarbolate or salicylate of the same alkaloid. It is freely soluble in acidulated water, in ether and in alcohol. Dose is the same as the above-mentioned salts. He also calls attention to soda-thymate as a pleasant carminative (dose: 6.50 gmm. for infants; 3.00 to 4.00 gmm. for adults) mouth-wash in aphtha and muquet, as an injection in vaginal, uterine, and vesical affections.—*Med. Rec.*

PILOCARPINE IN HICCOUGH.—Dr. Ortille was successful with gmm. 0.025 muriate of pilocarpine in curing hiccough which had resisted every remedy. The patient was 62 years old, and was suffering from symptoms of cerebral thrombosis. The singultus continued even while the patient was under the influence of morphia.—*Medical Rec.*

BROMIDE OF POTASSIUM.—In the *Allg. Zeit. fur Psych.*, Dr. Bettger contributes an article on the "Misuse of Bromide of Potassium," which has a general interest in view of the large quantities of this drug administered, and its supposed incapacity of doing harm. The author says that the long continued use of this remedy often gives rise to a well-defined disease,—*bromism*, which is characterized by weakness, lassitude, depressed action of the heart, cold extremities, heaviness of speech, a papular or pustular eruption and characteristic sweet odor of the breath. In a still higher degree stupor supervenes, memory and articulation are impaired, hallucinations occur, with tremor of muscles and unsteady gait, the pupils are unequal and inactive, sexual power and, in females, menstruation, are diminished. The diagnosis of this advanced stage from progressive general paralysis (paralytic dementia) is difficult. A fatal result is not uncommon. —*Maryland Med. Jour.*

VEGETABLE PEPSINE.—Mr. Wittmack calls attention to an interesting property of the juice of the papaw, or fruit of Carica Papays, that is, its power of rendering hard flesh tender, Fifty grammes of beef in one piece, enveloped in a leaf of the plant during 24 hours, at 15°C. after a short boiling became perfectly tender; a similar piece, wrapped in paper, and heated in the same manner, remained quite hard.

A fraction of a grain of the dried juice was placed with 10 grains of lean beef, in one piece, in sufficient distilled water, and boiled five minutes, below the boiling point, when it fell into several pieces, and at the close of the experiment it had separated into shreds. The following are the conclusions arrived at by the author: 1. The milky juice of the Carica Papaya is (or contains) a ferment which has an extraordinarily energetic action upon nitrogenous substances, and, like pepsine, curdles milk. 2. This juice differs from pepsine, in being active without the addition of free acid—probably it contains a small quanity—and, further, it operates at a higher temperature (about 60° to 65° C), and in a shorter time, (five minutes at the most). 3. The filtered juice differs chemically from pepsine, in that it gives no precipitate on boiling, and further, that it is not precipitated by murcuric chloride, iodine and all the mineral acids. 4. It resembles pepsine in being precipitated by neutral acetate of lead, and not giving a precipitate with sulphate of copper and perchloride of iron.—*Pharmaceutical Journal and Transactions.*

HYSTERO-TRACHELORRHAPHY is the simple prattle of the gynæcologist for the operation of sewing up a lacerated cervix. Dr. E. C. Dudly, of Chicago, is credited with the invention of the term, and according to Dr. Mundé, he still lives. Surely the gynæcologists are trying to make themselves as ridiculous as the eye-men in the selection of their terms. Imagine such a term as the one above being used for "convenience," sake, as is averred!—*Louisville Med. News.* J. S. B. A.

Correspondence.

NEW YORK, 43 West 32d ST., Feb. 12, 1879.

EDITOR JOURNAL:

I thank you for your prompt reply to my note, asking you if you would republish from the *Hospital Gazette* of April 11th, 1878, an editorial, containining a reply to some portions of Dr. Edward Borck's paper, published a month earlier in your journal. I made this request at so late a day, because, when I wrote, I had just received a reprint of that and a previous paper, "with slight changes" issued in a pamphlet form; copies of which, the public is informed, are for sale at "all the leading book stores in the United States."

Among the "slight changes," I notice an omission of one or two misquotations, which had appeared in Dr. Borck's paper as originally published in your journal; but other misquotations and misstatements contained in the original papers, and referred to by the *Gazette*, were repeated. It is this repetition and wider circulation of the errors, which has induced me to ask of you this favor.

There is one point not considered in the "editorial" which I may be permitted to refer to, namely: that when Dr. Borck, Dr. Bauer and others, allude to the results obtained by me in the treatment of fracture of the femur and other long bones, they seem to forget that in all my published writings, I have sought to show the average and particular results obtained by myself *and other surgeons*, and this too in the employment of all the approved forms of apparatus. It was only in the 5th edition of my treatise on fractures and dislocations, that any attempt was made by me to separate my own results from those obtained by other surgeons, (see p. 435, fifth ed.) and then only in the case of fractures of the thigh. If other gentlemen have been more successful than I have been, as shown by the results as there given, I am glad to know it; but they cannot ask me to accept of their statements until they have verified their observations and conclusions by an equal number of cases, examined with equal care and attested by one or more experienced surgeons, who have repeated the examinations; especially when, as in the case of Dr. Borck, no attempt is made to inform the public as to the extent of his experience. There are other reasons why we are not yet prepared to accept of his statements without further proof of their accuracy. There is nothing new in the prin-

ciple iuvolved in the construction of his apparatus; nothing that has not essentially been applied before; and with no such results as he claims to have obtained. Indeed this is true of the method employed by all of the four or five gentlemen in this country, who claim equally good results as those claimed by Dr. Borck. Not one of them involves a principle that has not been tried before, or by others of equal skill, and with no such results. Yet they are widely different from each other; some getting their absolutely perfect results in the straight position, and some in the flexed position; some with extension, and some without extension. I refer to the "four or five" gentlemen who make these extraordinary claims, with dissimilar and opposite methods, because it is a fact that the number of those who publicly put forward such claims, does not, so far as I am aware, exceed five, and their claims are set up, *not against my experience*, with *my mode* of treatment, but against the experience of nearly every practical surgeon in this country and abroad. We have a right to demand therefore, some better testimony than the vague statements hitherto given to us. I would mention the names and the apparel employed by these few gentlemen who are not so "unfortunate" as I am, and others are, but that some of them would blush when placed face to face with each other; and they would be forced to declare, if they would remain consistent with their own published statements, that not one of the other four had spoken the truth, in short, that they were practicing a species of charlatanry. I would by no means intimate that these gentlemen are charlatans. My charity is broader than their own; but when one of the five gentlemen declares that the principle of extension is alone capable of making perfect limbs, and that if properly employed it will certainly, or almost certainly do it; and another declares that only by refusing to employ extension, can that end be attained, and that by such omission, upon a properly constructed splint, it will be attained; then we must see that they practically impeach each others veracity, or call in question each others capacity. Before Dr. Borck calls attention to my "unfortunate" results, aud the equally "unfortunate" results of the large majority of surgeons, as admitted by themselves, it might seem proper that he should dispose of those other rival modes for which the inventors claim just as much as he does for his mode, perhaps more. He ought either give to them all his unqualified approval, or he should prove by argument or observation, that they did not and could not have obtained the results they claimed, and that there was a need, therefore, for his better method.

Finally my dear Doctor, permit me to add, that if I am jealous of my own reputation, and cannot look with indifference upon misrepresentations, which by their wide circulation may become established in the minds of a large proportion of my profession as established facts, I am still more jealous of the interest of the

science of medicine and surgery, and it is for its interest especially that I have asked for this space in your journal.

Yours truly, FRANK H. HAMILTON.

[Extract from the *Hospital Gazette* of April 11th, 1878.]

In the *St. Louis Medical and Surgical Journal* for March, 1878, there appears an article entitled "Review on the Treatment of Fracture of the Femur," by Edward Borck, M. D., which is supplementary to an article from the same writer published in the January number of the same journal, and describing his mode of treatment. The two papers are characterized especially by their misquotations of others writers and by a certain flippancy of style.

In the January number Dr. Borck says (quoting as he subsequently explains from the *Journal of Materia Medica* for Nov. 1877), that Dr. Hamilton declares "there will always be some shortening in these fractures." Dr. Hamilton has never said anything of the kind, as every intelligent medical man knows who has read his writings or listened to his teachings. Dr. Borck in the second, paper refers to Dr. Hamilton's "General Treatise on Surgery," and to his well-known "Treatise on Fractures and Dislocations," as if he had them before him when he wrote. Why did he not refer to these books for Dr. H.'s opinions rather than to the *Journal of Materia Medica*.

In the second paper Dr. Hamilton is quoted three times, the marks of quotation being employed in each instance. The language did not convey the impression that we were reading from Dr. H., and a reference to the lecture from which these quotations were made (*Medical Record*, January, 1878) showed that in neither was the quotation correct or nearly correct. We had supposed that every gentleman understood that in making a quotation from an author, and especially when the marks of quotation are employed, the writer is bound to use the words and punctuation of the author. Dr. Borck seems to think differently, and therefore exposes those whose opinions he handles to the risk of being so soiled before they are shown to the public that no one would recognize them, and the author himself would refuse to claim them.

Outside of the marks of quotation occurs the following passage: "Then he" (Dr. Hamilton) "passes in review different modes of applying splints, and is particularly disgusted with the double-inclined plane, charging in with shortening and with other faults. In this category he includes the lateral and coaptative splints. The Doctor tried these machines often in his early days, and never had obtained a good result, except by mere accident. He seems to be exceedingly unfortunate in the treatment of fractured femurs with the inclined plane and other apparatuses, while other surgeons, it seems, were very fortunate with these methods, and obtained what was called very good

results." The term "disgust" used by Dr. Borck to indicate Dr. Hamilton's opinion of double-inclined planes, is original with Dr. B.

Dr. Hamilton's real opinion will be better understood by reading the lecture referred to or by consulting his writings elsewhere.

If the phrase, "in the category he includes the lateral and coaptative splints" means anything, it must mean that Dr. Hamilton is disgusted also with coaptation and lateral splints. While the fact is, that in the lecture quoted from, and in all his published writings he has constantly urged the value of lateral or coaptation splints.

The last clause of the paragraph now quoted from Dr. Borck, contains a flippant slur, which cannot be passed unnoticed, not so much because of its utterance by Dr. Borck, as because it is the repetition of an insinuation to Dr. Hamilton's truthful representation of what has been accomplished by him in the treatment of fractures has subjected him to from others.

Whenever, of late, an American surgeon or mechanic patents a splint, and occasionally when the advocate of a particular mode of treating fracture has not patented his opinion, it has been found convenient, first, to state that Dr. Hamilton never makes a limb as long as it was before, or that he is "exceedingly unfortunate in the treatment of fractured femur;" and secondly, to affirm that the apparel now presented does make perfect limbs, neither of which statements are true. Thus a certain Dr. Parke, of Bloomington, Ill., whose useless splint is, we believe patented, says: "Prof. Hamilton says there is no splint yet devised that will prevent shortening of a fractured femur. I claim it is impossible for the limb to *shorten while in this splint.*" —(*Dr. Parke's Circular, p. 2.*)

Dr. Hamilton's views of the best treatment have been changed or modified from time to time, and in every successive edition he has carefully stated this modification, so that one who has read the first edition will scarcely find a form of apparatus approved by him to-day or illustrated in the last or 5th edition, or the German edition, which was recommended in the first, and in most cases the apparatus has been simplified, and brought more within the reach of the general practitioner. He still adheres to the straight position as that to be preferred in most cases; and he still pefers, *generally*, not to use plaster-of-paris in fractures of the thigh. In these respects his opinions have never changed.

If we have been led into a more prolonged review of the reviewers than was our intention, it was not because we desired to vindicate the views and practice of any gentleman, but because it seemed necessary in the interest of good morals and good manners. The matters of which we complain are not private grievances, but public, and we have, for that reason alone, given a public rebuke.

Editorial.

THE MEDICAL ASSOCIATION OF THE STATE OF MISSOURI.

This Association meets at Columbia, the Athens of our State, on the 20th of this month. From present indications, a full meeting is anticipated. The *St. Louis Clinical Record*, of May, very aptly says:

"The Medical Association of the State of Missouri will hold its annual meeting at Columbia, on the 20th of the present month. We hope that every physician in the State whose health and business will permit will attend. Something may be hoped from the State associations; the interests of physicians in one commonwealth like Missouri are so much in common, there is so much good to be obtained from a free interchange of thought, of modes of practice and of social courtesies, that these local gatherings should be encouraged in every way."

Of course the discussions following are usually fully as instructive and interesting as the subject discussed. Fortunately, this year we are to have the *whole* proceeding published, not the bare papers only. There is one other means of preventing our candle from being covered, and that is by having the whole of the transaction published through one of our medical journals. Sending our papers and discussion to 2,000 readers, is a very great improvement on sending it to 200 *hearers*, as heretofore.

Book Notices and Reviews.

A MANUAL FOR THE PRACTICE OF SURGERY. By THOMAS BRYANT, F. R. S. C., Surgeon to and Lecturer on Surgery, at Gray's Hospital. Member and Correspondent de la Societie de Chirurgie, de Paris; Second American from the Third Revised and Enlarged English Edition. [Philadelphia: Henry C. Lea.]

This book, of more than 900 pages, has a very complete table of contents as well as a full alphabetical index, thus enabling the busy practitioner to easily turn to any subject he desires. After this is an introductory, which contains some valuable suggestions as to the manner of studying cases.

The variety of subjects treated is unusually great, and they are treated in a fresh, pointed style, and bear many marks of the author's observations, as well as evidence of careful study of other authorities.

The frequent reference to American authorities, is in marked

contrast with other works on the same subject by English authors generally. Only a few of the subjects can be reviewed. Some points in connection with malignant tumors will be noticed. The cause of "Cancer is Obscure." Local injury may determine the "seat." Paget traced hereditary influence in one of every three cases; Sibley found it in one of nine; the author in 222 cases traced hereditary influence in ten per cent and agrees with Mr. De Morgan, that all that he said with regard to the constitutional nature of cancer, applied equally to the constitutional nature of any, the smallest growths that can be found in the body."

"Sir James Paget has pointed out, however, that when a local disease is inherited, it passes from parent to offspring in the same tissue, if not exactly in the same place, whereas when cancer is hereditary it may break out anywhere."

"Cancer is a disease of adult life although it may attack a fœtus in utero." "Is most apt to attack an organ that has passed through the active period of its existence." "Is a disease of degeneracy."—Paget. The author holds that cancer "appears to be in its origin, a local disease, and becomes general, either by the juices of the primary tumor exercising an impregnative, spermatic influence upon other parts or by dissemination of its elements," as taught by Simon. The practical deduction from the theory of local origin is that "the earlier a cancerous tumor is removed the better, and the better prospect of a cure."

The treatment consists in "improving the general health," and protecting the part from mechanical injury. The author discards all local applications, "except for the relief of pain," advises the removal by the knife, galvano-cautery and caustics" in the order named, of the last he regard chloride of zinc as the best.

In speaking of contusions with large extravasations, the author holds, "when the blood remains fluid the surgeon must not be tempted to draw it off until all hopes of its absorption has been abandoned. To meddle in these cases is often injurious but when the blood has broken up and suppuration appeared, a free incision into the part, followed by the application of a poultice is good practice." The author advises that the knot made in stitching the intestines be left on the serous surface; a better method we think, is that of dropping the free ends of the sutures into the lumen of the gut. In the chapter on Lithotrity no mention is made of Bigelow's method. He advises the use of the gum catheter as the best instrument for the treatment of stricture and recommends that it be kept in the urethra during the treatment, only removing one to be replaced by a larger one and says the relief by this method is more rapid and more permanent than by the usual gradual dilatation and safer and more permanent than by rupture or by internal urethrotomy.

The author discusses the division of fracture of the neck of

the femur into intra and extracapsular and prefers to classify them into impacted and unimpacted, thus proposing a possible for an impossible distinction as capable of being determined at the time of injury and having a practical bearing on the treatment to be adopted. J. T. HODGEN.

INJURIES OF THE EYE AND THEIR MEDICO-LEGAL ASPECT. By FERDINAND VON ARLT., M. D., Professor of Ophthalmology in the University of Vienna. Translated with the permission of the author by CHARLES S. TURNBULL, M. D. [Philadelphia: Claxton, Remsen & Haffelfinger. 1878. 12 mo., pp. 196.]

This volume bears upon upon the back of its cover the inaccurate and misleading title, "Injuries of the Eye, Turnbull."

It is a translation from Professor Arlt's reprint of a series of articles which he contributed to the *Wiener medicinische Wochenschrift* in 1874, in the hope, as he states in his preface, thus "to call the attention of the medical public more generally to the necessity of a careful examination and a correct diagnosis of these affections."

The author modestly suggests that "Specialists will find little that is new in these pages;" it is, nevertheless, a book rather for the specialist than for the general practitioner, inasmuch as the author presupposes on the part of the reader "an acquaintance with the modern means of investigation," under which he includes the determination of the state of the refraction, the measurement of the visual field, and the use of the ophthalmoscope. The book treats of the injuries of the eye under the following heads:

I. Injuries produced by sudden compression or concussion.

II. Injuries produced by the entrance of a foreign body.

III. Scalds and corrosions of the eyeball.

A fourth chapter treats of such affections as are either feigned or produced artificially and intentionally.

It would be superfluous to bear witness to the excellence of any practical work by Professor Arlt. The English translation will be of value chiefly to such ophthalmic practitioners as do not read German. JOHN GREEN.

SPERMATORRHŒA; ITS CAUSES, SYMPTOMS, RESULTS AND TREATMENT. By ROBERTS BARTHOLOW, A. M., M. D., Professor of the Theory and Practice of Medicine and of Clinical Medicine in the Medical College of Ohio, Cincinnati. [New York: William Wood & Co., 1879. Fourth Edition Revised.]

The demand for a fourth edition of this monograph shows that the admirable and most praiseworthy object of the author has been fully attained, viz.: to place the subject upon a scientific basis, and to divorce it from charlatanism. He believes, very correctly, that spermatorrhœa is a neurosis, and that though

structural alterations of the genital organs are coincident with the trouble, they are seldom causative, but at the same time he acknowledges that certain organic lesions of the generative organs give rise to the nervous derangement which manifests itself in involuntary seminal emissions, and that the repeated excitement of the venereal orgasm, by unnatural means, produces an undue exhaustion and expenditure of nervous force, which manifests itself in the languor, weakness and mental incapacity of the habitual masturbator, or the insanity and idiocy that so often results from repeated self-abuse. He contends, very truthfully, that the lesions resulting from masturbation are those due to the expenditure of nervous force and derangement of the intimate and harmonious relation existing between the sexual system and the cerebro-spinal centres, and not to a mere loss of seminal fluid. After describing accurately the causes and symptoms of spermatorrhœa as a disease, and spermatorrhœa as a symptom of other diseases, he reviews in a clear and concise manner the various methods, surgical and medical, that have been recommended, giving due weight to all that have proven useful, and discouraging routine treatment. Cauterization, circumcision, compression and other mechanical methods are accorded their full value, and anaphrodisiacs and aphrodisiacs are also recommended in suitable cases. Camphor, bromide of potash, lupuline, ergot, nux vomica, phosphorus and cantharides, all serve a good purpose in some cases.

The author says that jaborandi, or its alkaloid, pilocarpine, is an efficient aphrodisiac, and is indicated in cases characterized by debility. He says: I have found it more efficient than any of the agents referred to; more efficient than phosphorus. Thirty minims of the fl. ext., morning and evening, is a sufficient dose. He also recommends tincture of cimicifuga (actea racemosa), as a valuable aphrodisiac in some cases, especially where there is much nervousness. This latter remedy acts most promptly and admirably in cases of chorea, by quieting the nervousness, and I should be inclined to give it in spermatorrhœa, with a view of accomplishing the same purpose. Gelseminum is also very highly recommended (as it deserves to be), in cases where nervousness predominates. The author, in my opinion, does not lay as much stress as he should upon the use of iron and nux vomica in *large doses*, for I know of no remedial agents that are adapted to so many cases, and accomplish so much permanent good. The muriated tincture with glycerine, or in a pleasant elixir, is the very best preparation that we can use, and should be administered for weeks in drachm and drachm and a-half doses, four times in twenty-four hours, with full doses of nux vomica, or ignatia amara.

As nothing is said of damiana, I presume that the author's experience with this much lauded and extensively advertised drug has been as unsatisfactory as mine. It is claimed, however,

by some respectable medical men, that most of the preparations of damiana are spurious, and consequently worthless, and I have to-day received some of the *genuine*, and intend to give it a fair trial. This work of Dr. Bartholow contains in a concise form and perspicuous style all the valuable information upon spermatorrhœa that is accessible to American practitioners, and should have a place in every medical library. THOS. KENNARD.

ELEMENTS OF COMPARATIVE ANATOMY. By CARL GEGENBAUR, Professor of anatomy, and Director of the Anatomical Institute at Heidelberg. Translated by F. Jeffrey Bell, B. A., Magdalen College, Oxford. The Translation revised and a Preface written by E. RAY LANKESTER, M. A. F. R. S., Fellow of Exeter College, Oxford, and Professor of Zoology and Comparative Anatomy in University College, London, 8 vo. pp. 645, 356 illustrations. [London: Macmillan & Co., 1878.]

It is almost unnecessary, even to call the attention of anatomists to a book bearing on its title page the names of Carl Gegenbaur and E. Ray Lankester, and to praise it is entirely superfluous. Prof. Lankester in his valuable preface, states that "We do not possess in the English language any modern work on comparative anatomy, properly so called; that is to say, a work in which the comparative method is put prominently forward as a guiding principle in the treatment of the results of anatomical investigation. The present work, therefore, appears to me to form a most important supplement to our existing treatises on the structure and classification of animals. It has, over and above this, a weighty and distinctive recommendation in that throughout, and without reserve, the doctrine of evolution appears as the living, moving investment of the dry bones of anatomical fact." He then proceeds to mention some new facts and views which have arisen since the German edition was published in November, 1877, and "to point out certain statements of fact, or of interpretation of fact, in which Prof. Gegenbaur differs widely from authorities usually followed in this country" (England), in regard to the nuclei of cells, reproduction of infusoria, origin of male and female reproductive elements from different germ-layers. Origin of the limbs of vertebrates, relation of the malleus and incus to the mandibular and hyoid arches; nomenclature of the lobes of the brain in fishes, nomenclature of the digestive tract, and other important subjects.

He then gives three schemes of classification, Prof. Huxley's, Prof. Gegenbaur's and his own; remarking that "It is by no means desirable that students should be taught to accept any one scheme of classification as finite. They should be taught to look upon these schemes as the condensed expression of an author's views—as the epitome of his teachings." Every teacher and student of anatomy ought to read, and be familiar with the first enty pages of the book, comprising the introduction and gen-

eral parts, which treat of the Structure of the Animal Body. 1st. Stages of the Animal Organism, Differentiation of the Animal Organism, Origin of the Organs, System of Organs, Change in the Organs, Correlation of Organs, Fundamental Forms of the Animal Body, etc.; and the special part, divided into nine sections treating of Protozoa, Coelentevata, Vermes, Exchinoderma, Arthropoda, Brachiopoda, Mollusca, Tunicata and Vertebrata must be of great interest and value to the special student of comparative anatomy. The book is published with unusually fine illustrations, paper and print, and fails only in the usual weak point of English text-books, that of binding.

H. T. BOUTWELL.

[Through the courtesy of the London publishers we have received the following books for notice. Several of these are already well-known, though none of them are as generally sought after by the American profession as they deserve to be. This however is only because they have not been sufficiently introduced.]

GOULSTONIAN LECTURES ON THE NATURAL HISTORY OF PULMONARY CONSUMPTION. By A. B SHEPHERD, M. A., M. D., F. R. C. P; pp. 89. [London: Smith, Elder & Co.]

PNEUMONIA; A clinical study. By OCTAVIUS STURGES, M. D., F. R. C. P. [London: Smith Elder & Co., 1876; pp. 336.]

REPORTS ON DISEASES OF THE CHEST. 1875. By DR. DOBELL; pp. 353. The same, 1876; pp. 307. The same, 1877; pp. 438. [London: Smith, Elder & Co., 1877.]

The little volume of Dr. Shepherd, has for more than a year had an honored place in the trans-Atlantic libraries and it should be better known among us. The first lecture is more particularly a comparison of other men's work and observations regarding the pathological changes in phthisis. In the second lecture, the author divides all forms of phthisis thus, (1) pneumonic phthisis where dead or dying tissue elements are found choking up the alveoli and bronchi and leading to further destruction of the respiratory organ; (2) bronchitic phthisis, where changes occur in the walls of the bronchi and vesicles; (3) fibroid phthisis from alcoholism, syphilis or anthracosis. In the third and last lecture the hereditariness of phthisis is argued and the mean duration and prognosis considered. Williams has (1871) placed the average duration of phthisis at eight years and our author is even more encouraging, for he says "I see from time to time cases of the chronic form of cheesy phthisis keeping the almost 'noisless tenor of their way' with but little if any change in physical signs, and I cannot but suppose that the body becomes habituated to the changed circumstances of life," or in other words the cheesy form of phthisis is not necessarily hopeless. Small doses of cod-liver oil are called for in many cases and large ones never, but such agents as pancreatic

preparations are thought to be useless. Thirteen handsome, accurate plates in color of microscopical preparations of the different forms of phthisis are no mean addition to these lectures. The publishers' work is faultless.

The writings of Sturges have also a place in English medical literature. After reviewing the history of pneumonia, the definitions and descriptions as offered by different authors are given, and then comes several interesting chapters on the physical characteristics. Afterward the complications of pneumonia are dealt with; delirium, rheumatism, pericarditis, renal diseases, alcoholism, starvation and other conditions in close relationship to pneumonic inflammation are considered in detail. Pythogenic or epidemic pneumonia, so frequently referred to in the medical periodicals since this book was issued, is well described. Then follows a study in morbid anatomy. This is so complete and withal so important that we refer to it at length and in succession.

(1) The pouring out of an exudation into the air vesicles through a large district of lung, yet variously in various parts of it; first of a mere watery fluid, presently of the fluid plasma of the blood with its formed elements and here and there, at separable little points, by actual rupture of undisguised blood. Along with this exudation or hemorrhage, a corpuscular generation takes place, representative partly of imigrated white corpuscules, partly of epithelial growth. So soon as the exudation begins to solidify, these products become apparent, entangled in the meshes of it. Next, this intervening network itself disappears and the closely crowded corpuscles are held together by their own stickiness. They too are undergoing change, some of them resolving into fat and represented by coarse granules; then comes a lowering of this corpusculated mass, its granular transformation, liquefaction and final removal mainly by absorbtion. Catarrhal proliferation is a variable incident of this process, sometimes aiding, sometimes retarding and sometimes arresting it. In the failure of this process of removal, the proper lung structure becomes implicated secondarily. The corpusculation, which was at first wholly intra-alveolar, begins to infiltrate the alveolar wall and both here and there to assume the character of pus. The boundaries of the several air sacs are thus rendered indistinct, owing to this common implication and are soon only to be made out by faint and cloudy paths. At length these partitions breaking down at many points and coalescing with the alveolar contents, there remains no more than the dêbris of lung structure recognizable chiefly by scattered pigment.

(2) The theater of the pneumonic process, so far as the lung is concerned, is not the lung texture but the lung spaces. The implication of the alveolar walls is secondary and accidental. In the ordinary non-fatal career of the disease it is probable that these undergo no structural change, as it is certain that they sus-

tain no permanent injury from this temporary lodgment of a morbid product.

Pneumonia is said to occupy a middle place between the specific fevers, so-called, and the local inflammations. It falls short of one by wanting the material of infection and a period of incubation (found, however, in some of the epidemics but recently reported), it exceeds the other by possessing the character of orderly pyrexia and definite duration.

The author is careful, and justly so, to distinguish between pneumonia and phthisis. The latter necessarily involves the lung structure; the former, only occasionally, and then secondarily. Phthisical and tubercular subjects are not more prone to pneumonia on that account; yet an attack of pneumonia may in rare cases hasten the development of acute phthisis.

Good judgment is shown in the section on treatment. After noticing most of the remedies that have been used in pneumonia, this solid, honest result is reached; that the supporting treatment is most to be relied upon—*i. e.*, quiet, rest, nutritious diet, alcohol in sufficient quantities, where there is prostration, and quinine where the pyrexia is great. A point of no little moment, which our author fails to mention, is the assistance that may be given to the muscles of respiration when the muscular power is depreciated, by the use of a nervine agent, such as nux vomica or strychnia. Another matter of therapeutical value omitted is the relief obtained by the partial fixation of the invaded lung by the compress and bandage, the only safe substitute for the reprehensible practice of giving opiates in pneumonia. But the many excellencies of the book more than compensate for these and a few other inadvertencies. This is a book of value to any one who wishes to study carefully the important subject of which it treats.

The excellent compilations, made by Dr. Dobell, are intended to be a complete *précis* of the work of each year in the department of practical and scientific medicine, which includes the anatomy, physiology, morbid anatomy, pathology, diagnosis, etiology, therapeutics, climatology, etc., etc., relating to the thoracic organs. These year-books are most valuable for reference as an epitome of recent discoveries and research. The author is assisted by a large corps of coadjutors, who furnish reports from all parts of the world. Among them we may mention Bowditch, Da Costa, Draper and Flint, in the United States; Tobold, Gerhardt and Jürgensen, in Germany; Schrötter and Langer, in Vienna; Villemin and Larcher, in Paris, while every nation and language of to-day, where science has found a place, is represented. These names are a sufficient guarantee of the worth of the volumes, even. were the principal editor less distinguished than he is. It is needless to detail the many good points in each volume, for each is full of little books, which, having found favor when first published, are here condensed and

arranged carefully and conveniently. Hereafter these reports will no longer be annual, but will appear at such times as the accumulation of important material may render advisable.

WILLIAM PORTER.

LECTURES ON LOCALIZATION IN DISEASES OF THE BRIAN. Delivered at the Faculte de Medicine, Paris, 1875. By J. M. CHARCOT, Professor in the Faculty of Medicine of Paris; Chief of Salpetrieré Hospital; Member of the Academy do Medicine; of the Clinical Society of London; President of the Society de Biologie, etc., etc. Edited by BOUSNEVILLE. Translated by Edward P. FOWLER, M. D., of New York. 1879.

This book is presented just at the time such a thorough digest of this subject is needed, and the reputation of the author in analytical reasoning would justify us in anticipating just such a clear demonstration of the principles upon which the question of cerebral localization rests.

The book contains 130 pages, and comes in substantial cloth binding and is, in its workmanship, excellent. It is amply illustrated by plates displaying magnified views of cortical cells, and also a large number of sections of the brain, both normal and morbid, admirably presenting to the eye the topography of the region under consideration; this I regard as a very important feature of this book, and calculated to keep well before the mind continuity of structure, as well as the reciprocal influences of the various structures upon each other.

In the author's preface he indicates the only rational plan upon which so complicated a subject can be fairly elaborated.

"The secure basis of induction," he says "I have selected, as occasion required information, furnished by normal anatomy, experimental physiology and clinical observations, illustrated by minute and methodical examination of organic lesions."

The greater part of this work is devoted to the normal anatomy of the brain and its morbid states and lesions; the second and third lectures we regard as remarkably interesting in the fact of delineating the *structural character* of the ganglionic nerve cells—their form, size, nucleus, nucleolus, and the relation to location of these cells in the five different layers of the cortex; also, interesting, in the fact, that reasons are found in the composition of these cells, for locating the sensorum in the posterior portion of the brain. *Phrenology had only deductions*; and as soon as its professed or assumed localizations were examined under the tests furnished by analysis of primary structures and their lesions, it was left without a foundation; it had in reality no demonstrative substructure. We are led to expect that following this work, as more properly acontinuation will be a demonstration of the relation and dependence of psychical phenomena, with, or upon the cortex, and we trust he will by anatomico-pathological study of the encephalon, given to the stu-

dent of mental physiology something more positive than has yet appeared. He indicates in his last chapter that in his next lectures he will give more attention to "localization in the cerebral cortex," and which he justly designates as a difficult study.

C. W. STEVENS.

DIFFERENTIAL DIAGNOSIS; A MANUAL OF THE COMPARATIVE SEMEIOLOGY OF THE MORE IMPORTANT DISEASES. By F. DE HAVILLAND HALL M. D., Asst. Physician to the Westminster Hospital London. American Edition, with extensive additions. [D. G. Brinton, Philidelphia Publsher. 1875.]

This work, like its numerous congeners, fairly subserves its purpose, and is not without merit in some respects. Yet it possesses no quality deserving of special recommendation. It was evidently intented by its auther, Dr. Hall, to be a very modest little work, comprising a "*Synopsis of the Diseases of the Larynx Lungs and Heart,*" in which the differential diagnosis of these affections was conveniently illustrated in a tabular form. The American editor (whose name does not appear,) has applied the same method of tabulation to "all the other more common diseases," thus very much enlarging the original volume. This method of tabulation, although it has its manifest conveniences, enforces a certain amount of formality, which compels the omission of many little points which frequently prove of vital importance in diagnosis. The effect is to cramp two or more diseases into certain patterns, cut for the occasion, and thus contrast them. This answers a good purpose in the main, especially for students who are too lazy to read up their cases thoroughly, but for experienced practitioners, who are looking for the *nice points*, for the obscure features of disease, it is worse than worthless. This book, and many others like it, is simply a hasty and imperfect compilation of many facts, and some errors hitherto published by others. To a man really capable of making a diagnosis, it will prove of little value, to the inexperienced it will be a convenience, though we would advise all such to read up their cases in some fuller treatise, otherwise they would find themselves "tripped up" when they least expected it.

W. COLES.

HINTS IN THE OBSTETRIC PROCEDURE. By WM. B. ATKINSON, A. M. M. D., Physician to the Department of Obstetrics and Diseases of Women, Howard Hospital, etc. [Philadelphia: D. G. BRINTON, Publisher, 1879.]

This little brochure of 120 pages whilst it does not aspire to a complete *vade mecum*, contains a great many useful hints in obstetrics, but none, so far as we can discover, which have not been fully set forth in the many well-known works on midwifery. The young practitioner will find it convenient and reliable for reference. The volume before us has been carefully revised and brought fully *en rapport* with the latest authorities. Its teachings are sound and excellent.

W. COLES.

METEOROLOGICAL OBSERVATIONS.

By A. WISLIZENUS, M. D.

The following observations of dails temperature in St. Louis are made with a MAXIMUM and MINIMUM thermometer (of Green, N. Y.). The daily minimun occurs generally in night, the maximum at p. m. The monthly mean of the daily minima and maxima added and divided by two, gives quite a reliable mean of the monthly temperature

THERMOMETER, FAHRENHEIT—MARCH, 1879.

Day of Month	Minimum.	Maximum.	Day of Month	Minimum.	Maximum.
1	33.0	48.0	18	21.0	39.0
2	31.0	43.0	19	23.9	41.0
3	30.0	37.5	20	17.0	41.0
4	34.0	47.0	21	34.0	43.0
5	34.0	51.0	22	39.0	44.5
6	45.0	62.0	23	31.0	61.0
7	48.5	77.0	24	49.0	57.5
8	58.5	78.5	25	40.5	60.0
9	61.0	76.5	26	49.5	74.0
10	56.5	77.5	27	47.0	75.0
11	43.0	58.0	28	56.0	**84.0**
12	40.0	66.0	29	52.5	76.0
13	45.0	55.0	30	48.0	61.0
14	22.5	35.0	31	41.5	53.5
15	28.0	34.0			
16	22.5	23.5	Means	39.3	55.1
17	15.5	30.5	Monthly Mean	47.2	

Quantity of rainfall, 1.85 inches.

ERRATA.—Tne minimum in December, 1878, was —1.0 on the 24th. The minimum in January, 1879, was —10.5 on the 3rd.

Marine Hospital Reports.

RIO DE JANERIO— For the 5 weeks ended March 1st, the total deaths averaged 215 per week, an annual ratio of 37. During the 5 weeks, small pox caused 31 deaths; pernicious fever, 48; yellow fever, 168 deaths. The latter disease has steadily increased during the period, and official information has been received that the statement of deaths published is probably far short of the actual number.

GREAT BRITIAN—Week ended March 22nd. The average death rate in 23 large towns was 28 per 1,000. Rate in Dublin, 34; Sheffield, 32; Manchester, 31; London, 30; Liverpool, 28; Glasgow, 25; Brighton, 23; Edingburgh, 16. Whooping-cough and measles were excessively fatal in several towns, and the deaths from acute lung diseases were still on the increase in London, causing 705 of the 2,085 deaths reported for the week. Small pox caused 16 deaths in London, and 14 in Dublin.

PARIS—Week ended March 20th. Deaths, 1,108; annual rate,

29; small-pox caused 15 deaths; enteric fever, 29; diphtheria, 27.

GERMAN EMPIRE—Week ended March 15th. In 146 towns the average deaths rate was 27.2. At Berlin, 24; Hamburg, 27; Dresden, 26.5; Cologne, 25; Frankfort, 24.3; Munich, 32; Strasburg, 38.

The *Rinderpest* is extending in Bohemia.

Small-pox caused 58 deaths at St. Petersburg; 15 at Vienna; 13 at Buda Pesth and 3 at Geneva.

At the latest advices from Bombay, Calcutta, and Madras fevers were very prevalent, and small-pox caused numerous deaths in each city.

The Surgeon General of the U, S. Navy has furnished the following facts in regard to the recent outbreak of yellow fever on the U. S. Steamer Plymouth. On November 7th last, four cases of yellow fever occurred on board the vessel while lying in the harbor at Santa Cruz; these were removed to the hospital on shore, and the ship sailed for Norfolk. Three mild cases occurred during the voyage, and the Plymouth was ordered to Portsmouth, N. H., thence to Boston. At the latter port everything was removed from the ship, and all parts of the interior freely exposed to a temperature which frequently fell below zero, the exposure continuing more than a month. During this time the water in the tanks, bilges and in vessels placed in the storeroom was frozen; one hundred pounds of sulphur were burned below decks, this fumigation continuing for two days, and the berths, decks, holds and store-rooms were thoroughly whitewashed.

On March 15th the ship sailed from Boston southward; on the 19th, during a severe gale, the hatches had to battened down, and the berth deck became very close and damp. On the 23rd two men show decided symptoms of yellow fever, and on the recommendation of the surgeon the vessel was headed northward. The sick men were isolated, and measures adopted for improving the hygienic condition of the vessel and crew. The surgeon reported that he believed the infection to be confined to the hull of the ship, especially to the unsound wood about the berth deck, all the cases but one having occurred within a limited area; and that while the Plymouth is in good sanitary condition for service in temperate climates, should she be sent to a tropical station, probably no precautionary measures whatever, would avail to prevent an outbreak of yellow fever.

J. B. HAMILTON, M. D.,
Sur. Gen. U. S. Marine Hospital Service.

[The fact that the *Plymouth's* crew was attacked with yellow fever after the vessel had been exposed for more than one month to a temperature that was lower than zero, will cause some uneasiness in the minds of those who have advocated the use of ice as a disinfectant.—EDITOR.]

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THEAMOMETER, FAHRENHEIT—APRIL, 1879.

Day of Month	Minimum.	Maximum.	Day of Month	Minimum.	Maximum.
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2	32.5	62.0	19	49.0	71.0
3	**26.5**	42.5	20	43.5	67.0
4	27.0	49.0	21	50.0	78.0
5	30.5	55.0	22	57.0	85.0
6	40.0	72.0	23	62.5	**86.0**
7	49.5	59.0	24	62.0	83.0
8	40.0	67.5	25	64.0	72.0
9	52.0	73.0	26	58.0	74.0
10	47.5	51.0	27	62.0	76.0
11	41.5	65.5	28	47.0	71.5
12	38.0	64.5	29	55.5	82.0
13	47.0	76.0	30	53.0	67.5
14	55.5	72.0	31	....	....
15	42.0	55.0			
16	44.0	59.0	Means	46.5	66.9
17	38.0	53.0	Monthly Mean	56.7	

Quantity of rainfall, 2.07 inches.

MORTALITY REPORT.---CITY OF ST. LUIS.

FROM FEB. 23 1379, TO APRIL 22, 1879.

Septicæmia..... 1	Cholera Infantum	Hydrocephalus &	Apoplexy 9
Measles	Inanitio, Want of	Tubercular Men-	Canysis and At-
Syphilis Cong'al.. 2	Breast Milk, etc. 36	ingitis..... 3	electasis..... 3
Scarlatina..... 3	Alcoholism..... 3	Meningitis and	Premature & Pre-
Pyæmia 4	Rheumatism and	Encephalitis 5	ternatural Birth. 14
Erysipelas.....10	Gout..... 3	All Diseases of the	Surgical Operat'ns
Diphtheria 9	Cancer 17	Brain and Ner-	Deaths by Suicide 7
MembranousCroup11	Phthisis Pulmon..85	vous System....29	Deaths by Accid't 9
Whooping Cough. 1	Bronchitis 26	Cirrhosis of Liver	
Gangrene	Pleuritis	and Hepatitis...24	Total Deaths from
Typhoid Fever.... 6	Pneumonia.....73	Enteritis, Gastro-	all Causes.....537
Cerebro Spinal Fe. 4	Heart Diseases....21	Enteritis, Peri-	Total Zymotic Dis-
Remittent, Inter-	Other Diseases of	tonitis, and Gas-	eases 131
mittent, Typho-	Respir'y Organs 17	tritis 7	Total Constitution-
Malarial, Con-	Entro-Colitis.....	Bright's Disease	al Diseases.....163
gestive and Sim-	Marasmus—Tabes	and Nephritis... 4	Total Local Dis-
ple Continued	Mesenterica and	Other Diseases of	eases 241
Fevers.....19	Scrofula 23	Urinary Organs. 6	Total Develop'tal
Puerperal Disea's.14	Convulsions.....17	Recto-Pharyngeal	Diseases 17
Diarrhœal " 8	Aneurism	Abscess 1	Deaths by Viol'ce 16

CHAS. W. FRANCIS, *Health Commissioner.*

DEATH RATES AND MORTALITY.

Per 1,000 Inhabitants, Annually, in the Laryest Amerscan and Foreign Cities: According to the Latest Returns.

CITIES.	Population.	Date of Return.	Deaths from all Causes.	Annual Death Rate per 1000	Diph & Croup	Scarlet Fever	Pneumonia & Bronchitis.	Phthisis.
New York.	1.094.000	5 weeks ending April 5	2,873	27.58	85	228	507	355
Philadelphia	901,000	5 " " " 5	1,157	17.20	48	54	178	159
Brooklyn	528,000	5 " " " 5	1,114	20.51	65	68	219	219
St. Louis	503,000	5 " " " 5	537	11.10	20	3	99	85
Chicago	460,000	Month of March	645	12.16	74	31	..	63
Baltimore	365,000	4 weeks ending April 5	570	20.25	17	23	96	81
Boston	363,000	5 " " " 5	737	20.76	37	16	117	136
San Francisco, Cal	300,000	5 " " March 28	388	13.88	15	2	33	76
Cincinnati	280,000	3 " " March 29	304	18.86	14	44	35	39
New Orleans	210,000	4 " " " 30	369	22.80	3	..	53	80
Buffalo	170,000	4 " " " 5	137	12.50	24	16	3	19
Cleveland	162,000	5 " " " 5	279	17.86	17	5	25	18
Washington, D.C.	160,000	2 months ending Mar 31	712	25.13	15	31	..	137
Pittsburgh	145,000	5 weeks ending April 5	231	15.20	18	4	23	10
Newark	126,000	3 " " " 5	218	30.16	10	2	36	37
Milwaukee, Wis.	124,000	.....	.....	.....	..	..	..	..
Richmond, Va.	79,000	4 " " March 22	102	18.53	2	7	10	14
New Haven, Conn	60,000	5 " " April 5	26	22.50	1	1	..	..
Charleston.	57,000	5 " " " 5	91	16.64	4	..	..	11
Memphis, Tenn.	50,000	.....	.....	.....	..	..	..	..
Mobile	40,000	.....	.....	.....	..	..	..	..
Wheeling	30,000	Month of March	47	18.80	1	21	..	4
Savnnah	.....	.....	.....	.....	..	..	..	..
Indianapolis	.....	.....	.....	.....	..	..	..	..
Sprinfield, Mass.	31,500	.....	.....	.....	..	..	..	..
Nashville, Tenn.	27,000	Month of February	54	23.91	..	..	..	..
Sacramento	25,000	2 months ending Feb. 28	59	14.60	..	..	..	..
St. Paul, Minn.	20,000	.....	.....	.....	..	..	..	..
London	3,621,000	1 week " Mar. 29	2,078	29.90	..	..	..	..
Paris	1,988,806	1 " " " 27	1,199	31.30	..	..	..	..
Berlin	1,049,171	1 " " " 8	572	26.10	..	..	..	..
Vienna	737,280	1 " " " 22	508	35.80	..	..	..	..
St. Petersburgh	669,471	1 " " " 15	622	48.30	..	..	..	..
Bombay	578,156	1 " " " 29	487	31.00	..	..	..	..
Glasgow	538,338	1 " " " 29	273	24.30	..	..	..	..
Liverpool	531,682	1 " " " 29	264	25.60	..	..	..	..
Naples	475,407	December 10 to 16	277	31.60	..	..	..	..
Calcutta	429,535	" 29 to Jan. 24	409	49.60	..	..	..	..
Hamburg	406,104	February 2 to 8	217	27.00	..	..	..	..
Birmingham	388,884	1 week ending Mar. 29	197	26.40	..	..	..	..
Brussels	175,785	1 " " " 15	183	39.50	..	..	..	..
Manchester	361,819	1 " " " 29	207	29.90	..	..	..	..
Dublin	314,666	1 " " " 29	197	32.70	..	..	..	..
Leeds	311,860	1 " " " 29	147	24.60	..	..	..	..
Amsterdam	308,952	1 " " " 15	174	29.30	..	..	..	..
Sheffield	297,138	1 " " " 29	163	28.60	..	..	..	..
Rome	286,400	Dec 29 to Jan 4	94	16.70	..	..	..	..
Turin	227,846	Jan 26 to Feb 1	109	20.80	..	..	..	..
Alexandria	121,034	Jan 26 to Feb 1	149	36.50	..	..	..	..
Breslau	167,000	Feb 2 to 8	141	27.20	..	..	..	..
Edinburgh	226,075	1 week ending Mar 29	78	17.90	..	..	..	..
Dresden	207,845	February 2 to 8	90	22.00	..	..	..	..
Bradford	191,046	9 week ending Mar 29	86	23.50	..	..	..	..
Salford	177,849	1 " " " 29	85	24.90	..	..	..	..
Nottingham	169,396	1 " " " 29	94	28.90	..	..	..	..
Hull	146,347	1 " " " 29	60	31.40	..	..	..	..

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ARTICLE XVIII.

GENESIS.—By HIRAM CHRISTOPHER, M. D., of Independence, Mo.

IX.

There are but few, if any, words used with less precision and discrimination than the word *protoplasm*. This is true of its use by vitalists as well as evolutionists. It is sometimes applied to the contents of the cell-organism;[1] sometimes to the primordial utricle and the substance which it encloses; to all these things together with the cellulose wall; to the matter composing the sarcode of the foraminifera; to that which constitutes the amœba, white blood-corpuscles, and other naked masses of germinal matter; to the matter between the so-called nucleus and muscular tissue, and to the contractile matter itself; to everything which exhibits contractility; to nerve fibers, and to other structures possessing remarkable endowments, and to soft matter

1 Gray's Botany, p. 26.

within an elementary part, as a cell of epithelium; to the hard external part of such a cell, and to the entire epithelial cell.[2] Gray applies it to the elaborated sap;[3] and Carpenter, to "formed matter," proteinaceous in composition and nutritive in quality—"the appropriate pabulum for vegetable cells.[4] Prof. Huxley, whose views as to the genesis of living organisms would seem to require a well-settled conception of the genesis and nature of protoplasm, is not more fortunate in the use of the word than others.[5] But in his "Lay Sermons and Addresses," when discoursing on Spontaneous Generation, he gives the conception which he at that time considered and which other believers in the doctrine of evolution do now consider, as to the substance properly called protoplasm. He there says, "If he had been present, and could have seen the operation of physical forces when they reached the work of organized substances in the progress of their evolutionary action, he would have expected to witness the evolution of protoplasm from non living matter, and to see it appear under forms of great simplicity, endowed, like existing fungi, with the power of determining the formation of new protoplasm from such matter as the ammonium carbonates, oxalates and tartrates, alkaline and earthy phosphates, and water without the aid of light," (p. 367). Etymologically, it means the first formed organic matter, and is so viewed by Gray, when he speaks of it as the elaborated sap of plants, and by Huxley, when he conceives of it as the first organic work of the evolutionary force of physical agents.

But it has also an appropriated meaning, and in this sense it was used by Prof. Huxley in his Lay Sermons. With the scientists of that school, it not only means the first-formed, but is conceived of as having a power capable of evolving from its substance living organisms. With them, it is the germinal matter, itself non living, from which all living organisms take the genesis of their being, through the operation of the same force as that which generated the protoplasm from purely material substances, viz.: the physical, or the psychical conceived of as but a modification of the physical. Such a substance does not exist, and never did. If physical forces could, at the beginning of life on the earth,

2. Beale, Protoplasm, p. 30.
3. Botanical Text Book, pp. 53, 57.
4. Comparative Physiology, p. 375.
5. Beale, Protoplasm, p. 13.

have created such a substance, they ought to be able now to do the same. If, then, it is impossible for physical agents to create such a substance now, as has been demonstrably proved by the failure of all efforts made to show that spontaneous generation is a natural process, it is wholly an assumption to say that they could have done so at any time since the existence of matter. This fact alone is sufficient to show that the protoplasm of the evolutionist is a myth, and a physical impossibility.

If we limit the use of the term to the first-produced organic matter, the life-product of the action of the leaves of the plant is the only organic substance that can be etymologically, and in this sense, properly, called protoplasm—the elaborated sap of Gray, and the appropriate pabulum for vegetable cells of Carpenter. This is a substance formed from inorganic matter, and the first formed; but it is the work of living cells which have the power of forming organized substances out of inorganic matter. Only the artopoietic organs of the plant have this power. No other living organisms have this power. This is the beginning of the production of organized substances, but not the beginning of living organisms. These precede the others, and are absolutely essential to their existence. There was no protoplasm in which, or from which, they originated. The plant is the primary structure, and forms in its own organism the pabulum that contributes, and is necessary, to all its vital functions or operations. The elaborated sap, or, the proteinaceous compound—the protoplasm which is found in its organism, is its own pabulum; and were it removed, would contribute to the nutrition of other living organisms. It is not a living substance, nor capable of generating life; only of contributing to the vital operations of living organisms, as pabulum. It is as dead in the plant as it is out of it; hence, as a substance capable of generating living organisms in or from its substance, as contemplated by the protoplasm of the evolutionist, it has no power whatever. It is a life product and not a life producer.

We have, then, but two kinds of organized matter, viz.: 1st, the living organism; and, 2d, its products. The "formed matter" and "pabulum" of Dr. Beale are really but one substance essentially. They have the same genesis, and, hence, in this respect, may be regarded as one. The bathybius of Huxley, and the protoplasm of evolutionists are myths. There is no *diffused* living matter, nor a diffused organized substance out of

which living organisms arise spontaneously. Living beings are of necessity localized, because individuals. The organism is an agent of the life power, and essentially and necessarily finite in all the elements of its structure. The life is not in the matter. This is evident from the fact that organized matter of the same composition may be either living or dead. The living matter of the cell is proteinaceous in composition, and so is its "formed matter." An analysis shows the same composition as respects the material that constitute their fabric; but one is living and the other dead. The latter can never be changed into the former; and this fact draws a broad line between the nature of the two. It is capable of the widest diffusion without losing its character or identity, or becoming individualized, and by such diffusion it never presents centers of further diffusion, growth, or reproduction, features which are characteristic of living matter, or the living being.

It is very questionable whether living matter ever exists independent of the cell. Localization is essential to the idea of a living organization. If that which is called living matter, is really the living being, all other parts of the cell organism must be regarded as non-essential to the existence of the living being. As a fact, we know that no living being is alive in all its parts. The cell is the prototype, in this respect, of the matured individual; and as we regard the latter as the living being, we must also look on the cell organism as the living being. This is composed of contents and wall, and though the moving contents alone are alive, yet the whole organism, contents and wall, must be regarded as the living being. Now, as such, in all their entirety, did individuals begin. If as cells, then as contents and wall, as living and formed matter. If as germs, spores or seeds, then as such they began life, or as such were created—as such took their genesis; but whether as these, or as the matured individual, we can only conjecture in most cases. That some began as matured individuals we may feel assured, by the fact that the young of many animals, and especially of man, could not have survived extrusion from the uterus without the immediate and constant attention of the parent. Hence we may conclude that man began as the matured individual. Beginning in a cell of microscopic dimensions, that cell could never have been formed without the union of a germ and sperm cell, nor developed without the subsequent nutrition of the fertilized cell in connection with

the organism of the maternal parent. This is true of all the higher organisms, and essentially true as regards fertilization of the whole series. But as fertilized germs, spores, seeds or ova, we know that all plants and many animals may have had their beginning, since we know that at the present time, species can be preserved and perpetuated in this form or stage of development. The infusoria are all preserved and the species perpetuated in one of these ways. As such they exist in the air, and readily develop and mature when they find a nutritive fluid. All these, and many other species, may have been created and possibly were, in this form; but if so, the germ, spore, seed, or ovum was as truly the individual as the mature organism.

Now, if the higher species of the vegetable kingdom had their genesis in the seed form, and not in the fully developed plant, then the creation of the living organism involved and necessitated the creation at the same time of everything necessary to its growth and development to that period of time, or stage of development, where it could be sustained by the functions of its fully differentiated structure. In the seed we have the living organism and the food necessary for its nutrition up to the time when it can produce its own pabulum. In every seed the quantity of pabulum is just that in quantity which is found necessary to nourish the plant up to the time when it becomes an independent being. The contents of the eggs of birds are just enough to develop the embryo to the age when it can live on its own exertion or derive its food from without. An egg is an analogue of a seed. The embryo lies imbedded in its pabulum. The embryo is a living being, while the pabulum is only an organic body, the product of the organism whence the egg was derived. This is the essential constitution of all germs, spores, seeds or ova. If any species of living organisms began its existence in the seed or egg form, then it is evident that both the organism and its pabulum are of the same and simultaneous origin, and though of different chemical constitution, yet they have the same origin and time of beginning. Precedence on the part of either constituent is hardly supposable, and certainly unnecessary, since neither could have served its intended purpose without the presence of the other. The seed contains both a ternary and a quarternary compound—the living organism, diastase and starch; and all these had a simultaneous origin in the seed, and hence, neither can be regarded as having the precedence of the other. Neither

is protoplastic. There was, and could have been, no first-formed in the original seed. And the same is true, if the species began as the full developed and matured individual.

Though germs and spores are capable of germination and structural development under less favorable or more simple conditions than are seeds, yet the structure of the living organism in these is essentially the same as in the seed. Though they have not the pabulum connected with them as is found in seeds and ova, yet this living organism is developed under conditions, in a way and by means essentially the same. When they fall into substances capable of affording them the required pabulum, they nourish and grow on such pabulum until they reach that stage of structural development which enables them henceforth to derive their pabulum from sources adapted to the matured state of the plant. Their growth and development are essentially the same as those of the seed. Their pabulum may be ternary or quarternary in composition, protoplastic or deuteroplastic as respects the method or time of its production; but the process of development does not differ from that which takes place in the food-supplied seed. The germ or spore, like the seed, is, in its entirety, the living organism, and derived its existence originally from the creating power in all its entirety, and not from any pre-existing, proteinaceous substance, as has been conclusively shown by the failure of all experiments to prove the contrary. What is protoplastic as respects chemical composition, is found in the structure of the organism, either as content or enveloping membrane, originated with all other parts of its structure. There is no protoplasm in its structure that came from any pre-existing protoplasmic substance.

In whatever form or stage of structural development the original individual of any species may have begun its existence, we must conceive of that structure as being perfect. If as a germ, spore, seed or ovum, then these were all perfect; or if as the matured individual, then was that individual perfect. Each and all were created complete and perfect. Any other view is impossible, if there be such a thing as species in plants and animals. Now when we examine the simple cell-organism, we find that it is composed of contents and wall, the former living and the latter dead matter. Such is the structure of the most complete or highly differentiated organism. Man is not alive in all the parts of his organism. The mass of his organism is "formed matter."

If he began in the perfect state of his manhood, the first man did not differ in any essential particular from any that have proceeded from him. As the species began in a perfect individual, whence came the protoplasmic substances that existed in his body, whether living or dead? Every element of his organism, every kind of structure, bone, muscle, nerve and blood, were in the original individual, and all were of simultaneous origin. If any species began in the ovum, then likewise, did every element of the egg have the same origin and arise at the same time. It began as a perfect egg; for such has been the beginning of every individual since the existence of the first. "*Omnia ab ovo*" is an established fact. This being so, there was no original and universal protoplasm or non-living proteinaceous compound, in which, and from which living organisms had their genesis. So long as spontaneous generation shall remain but a dream or a hope, so long will it be that a germinal protoplasm is but a myth. The first formed living matter is the living *being*, whose origin we have shown to be wholly supernatural, and this living being began in its organic entirety, whether that beginning was as germ, spore, seed, ovum or the natural and perfectly differentiated individual.

No protoplasm or organic compound, proteinaceous in character, has ever been met with that was not the product of a living organism. If we use the word as meaning the first organized substance formed, the living organism is protoplastic. If we apply it to organic *products*, we must apply it to the organic substance called elaborated sap, since this is the first organic body formed by a living organism. This substance is formed, as all know, from inorganic material. In the cells of the leaves of plants inorganic matter is made to assume an organic relation, or formed into an organized substance. Living cells are the agents in the production of non-living organic matter, as well as the generating medium for the reproduction of living cells, and formation of formed matter. The elaborated sap is not a simple substance, or a single compound substance. All the organic material necessary for the nutrition of the plant is contained in it. It is known to contain both ternary and quarternary compounds. Hence, the proteinaceous or quarternary compound to which the word protoplasm is limited by all physiologists, is not

1. Gray's Botany, p. 27.

the first formed substance; for the ternary compound of sugar has a simultaneous origin with it in the formation of elaborated sap. As plants preceded animals in point of time; and as plants are the primary source of food for animals, the protoplasm or proteinaceous compound formed in animals, had its origin in the artopoietic organs of plants. The quarternary and ternary compounds produced by plants, constitute the food of animals. All organic products had their origin in them; and without the intervention of a living organism, no organic product, such as those constituting the food of animals, has ever been known to have had an origin. It is, therefore, evident and beyond question, that the protoplasm of the evolutionist has no existence in nature; and that there is no single organic substance that can be properly called protoplasm—*first formed*, unless it be the living being or elaborated sap.

Specificity rests on differentiation of structure, whether it be the differentiation of the system of organized beings, or of the organism of a species. Organs or tissues are the species of the organism, and are as immutable as are the species that characterize the organic system. The liver never discharges the function of the kidney, nor the kidney that of the stomach. The brain does not secrete bile, nor does the lungs take any part in the production of psychical phenomena. The mammary gland can never be made to discharge the function of the ovary, nor the urinary cyst that of the uterus. These facts are as familiar as household words, and are explained by the fact of differentiation of cells, whose specificity lies deeper than the visible organism, and is to be found in the determinations of the Power which manifest its true nature in the psychical phenomena of man. All the various cells of the organism arise from the single fertilized cell by a process of differentiation, the nutrition of which is supplied by the organized substances conveyed to them by the fluid of the general organism. These various cells come not from the proteinaceous compounds which they imbibe, or in which they may float, but from the reproduction of themselves. How specificity becomes impressed on cells as they are reproduced and multiplied, we know not; but we have some conception of the process of nutrition, in which the proteinaceous pabulum becomes a part of the structure of each, and contributes to their increase. As then, the various kinds of cells that compose the organism of the animal do not arise from the pabulum supplied to them, we may be

absolutely certain that protoplasm is in no way the nidus of life, or the germinating fluid of living organisms.

There is, then, no view which we can take of the origin and constitution of protoplasm, that justifies the assumption of the modern scientist regarding the origin or genesis of living beings. As a germinal substance, protoplasm has no existence. At best, it is but a life product, the work of a living organsim on the elements of dead matter. Being this, and nothing more, it should be discarded as ambiguous and indefinite. It can but occasion confusion and obscurity. It deceives, because it presents us with false representations. It is made to affirm what is not true. It presumes the verity of a myth-spontaneous generation, and assumes as a fact, that which has no existence but in the dream or the hope of the materialist.

ARTICLE XIX.

CEPHALÆMATOMIA AND VAGINAL HEMORRHAGE IN AN INFANT. OPERATION BY FORCIBLE EXTRACTION.

By PINKNEY FRENCH, M. D., of Mexico, Mo.

On 30th of January, 1879, I attended Mrs. L. in her first confinement. Her labor was neither tedious, difficult nor protracted, in fact, I considered it an easy labor. While assisting to dress the child, I observed a tumefaction or slight swelling situated upon the right parietal bone, covering perhaps, the posterior third of that bone. As I detected no fluctuation, and it being situated upon or near that part of the head that first presented itself at the outlet of the pelvis, I stated that it was what was termed caput succedaneum, and was probably the result of the pressure to which the child's head had been subjected during birth, and that it would soon disappear without treatment. I did not again see the infant until Feb. 5th, six days after birth. I was then consulted in regard to a hemorrhage from the vagina of the child. The discharge was found to be red fluid blood. There was no excitement, redness or swelling of the generative

organs, and the child's health was perfect. This discharge began on the second day after birth, and continued without the slightest interruption for four days, when it subsided of itself. To quiet the anxiety manifested by the family, I assured them that such cases were unattended with the least danger. I do not know that the causes of these discharges have been ascertained. I do know that it has been attributed to the same physiological causes that produce the catamenia in after life; but the discharge in the infant appears but once, and not at regular intervals as in menstruation, which militates against the correctness of such a theory. These hemorrhages are evidently pathological, and there is good reason for believing that it was dependent in this case upon a peculiar constitutional hemorrhagic tendency which was present at birth, as was the tumor to which I shall now give further attention. Upon inspection, the tumor was found to occupy the whole (or nearly so) of the right parietal bone, so rapid was its development. It was but a single tumor, did not cover a suture or encroach upon either of the fontanelles. It was full, tense and fluctuating, and was not affected in the least by the baby's crying or struggling. No pulsatory movement could be detected, and the scalp was unchanged in color. The condition of the tumor now left no doubt as to its real nature. The swelling was an effusion of blood beneath the pericranium, upon the surface of the skull from rupture of blood vessels. I explained to the family the nature of the tumor, and the course it would probably take if left to itself, and also informed them that it should be carefully watched in consequence of the liability there was of the development of serious symptoms. The parents thought the tumor was perceptibly enlarging, and were anxious that an operation should be early performed for its removal. The object of all early operations upon tumors of this kind, is to control the hemorrhage, for without the hemorrhage we will have no tumor. By bringing the detached pericranium in contact with the skull bone, applying a compress and retaining it in position until union shall have taken place, we will attain that end, for by the compress, the mouths of the vessels are temporarily secured, and by the uniting of scalp and bone permanently so. Hence, any operation that will evacuate the tumor, and any dressing that will secure the coaptation of the scalp and bone will ordinarily accomplish the end and effect a cure.

In my reading I find the following operations have been prac-

ticed, viz: By inducing suppuration in the tumor by a seton or by caustic applications; by puncturing with a lancet the most dependent portion of the tumor, pressing out the contents and applying compression, or by making an incision extending the entire length and depth of the tumor, removing the effused blood, closing the wound by means of adhesive plaster, and applying the compress.

Notwithstanding the fact that a majority of these tumors disappear under a very simple treatment, such as evaporating lotions and moderate pressure, I thought it necessary to operate, because I thought the case was liable to prove troublesome, owing to the extent of the tumor, which was so large as to alter very materially the natural shape of the child's head.

On Feb. 6th, I evacuated the tumor with a hypodermic syringe. I inserted the needle into the posterior part of the tumor, and drew off the syringe full, and at each successive filling I penetrated the tumor by introducing the needle through the original aperture, thereby producing no pain to the child except on the first introduction. Through the kindness of a young lady present, who exerted equable pressure with her fingers, so as to drive the effused blood into the neighborhood of the puncture, I succeeded in drawing off quite all of the extravasated matter, amounting to some three or four ounces, and then applied a compress so adjusted and secured with adhesive plaster, as to exercise moderate pressure upon the seat of the tumor. The puncture made by the syringe showed no signs of inflammation. I removed the dressing six days after and found no farther extravasation had taken place, and that union of bone and scalp had been brought about, thus effecting a complete and perfect cure.

I would not suggest the use of the hypodermic syringe for the evacuation of these tumors. I used the instrument in the absence of an aspirator. Although able surgeons advise that no surgical interference be attempted, I ask the question, would it not be well to use the aspirator in every case where the tumor is of any size? In view of the fact that in some instances the effused matter is not absorbed, and when such is the case, suppuration within the tumor, ulceration of the scalp, caries of bone takes place, and death ensues; and again in the reparatory process that spontaneously ensues, there is a deposit of osseous and plastic material forming a ridge or elevation, which encircles the base of the tumor, so that even in the best terminations, there

is always a thickening of that portion of the skull which corresponds to the seat of the tumor, and even when a cure takes place in this way, it requires months in way of time, and careful watching in consequence of the liability of the development of unpleasant symptoms. Again, the operation is not open to other objections urged by writers, such as danger of wounds of the scalp, etc., while by the exercise of that precaution which should always characterize a careful surgeon, the operation is unattended with the least danger.

The forcible extraction of the effused blood by an aspirator is certainly far preferable to an incision by the scalpel, and greatly superior to other operations that have been practiced, and decidedly more satisfactory to the surgeon, than waiting from month to month for a spontaneous cure to take place.

Gross' is the only surgery I have read that mentions subcutaneous evacuations in these tumors.

ARTICLE XX.

CHEST MENSURATION IN PHTHISIS. By WILLIAM PORTER, M. D., of St. Louis.

The very valuable results obtained from auscultation and percussion, in the diagnosis of pulmonary diseases, has overshadowed other and scarcely less exact methods of examination. Many of these are necessary to a complete understanding of cases in which the pathological conditions are not as yet far advanced—cases all the more important, because incipient, and for that reason, offering the best return for treatment. Among these methods may be mentioned the observation of the respiratory rhythm, the cardio-respiratory ratio, vocal fremitus, difference in surface temperature of the two sides of the chest, and the movement of the chest wall. From close observation of this latter phenomenon alone, much may be learned in the examination of a case of suspected incipient phthisis. The following deductions, from the notes of several years' attention to this subject, must stand or fall by the evidence.

I. *In the healthy, normal chest, the movements of the two sides are, practically, equal.*—This is especially true of the infra-clavicular region, where the phthisical process is generally first determined; the right lung in the middle and lower portions exceeds the left in size, and consequently, the respiratory movement of the right base is slightly in excess of the other, but this difference does not exist at the apices. In some subjects the muscular development of one side is more than that of the other, depending upon the greater use of the right or left hand, and so the diameters of corresponding portions of the two sides may be unequal, but for all that, the amount of movement of the respective sides near the apices is equal. In fifty adults of both sexes, between the ages of twenty-five and fifty, there was no appreciable movement of the two sides of the chest, the measurement being made at the second intercostal space.

II. *The relative expansion of the lungs is interfered with early in phthisis.*—The proper structure of the lung is necessarily involved in the first processes of phthisis; the intra-alveolar structure is infiltrated, or dead tissue elements choke the alveoli and bronchi, or changes occur in the walls of the vesicles and bronchi, which impair the respiratory function. Without discussing the tubercular nature of these changes, it is true that one or more of these conditions is found in every case of incipient phthisis. The respiratory movements of the affected lung are hindered, either by the elasticity being impaired, or by the blocking up of the avenues through which the air reaches the more intimate parts of the lung. As these pathological changes begin at the pulmonary apex, the equal expansion of the two apices is soon disturbed. In the majority of instances, (except in old persons, for reasons hereafter given (Sec. V), there is a noticeable difference of this kind, even before symptoms of disease can be discovered by percussion, and sometimes before auscultation can detect change.

The theme of a recent lecture by Prof. Armor, is the recognition of "the morbid stage existing between the mere diathesis and the deposits of tubercle," i. e., the pre-tubercular stage. The main results of physical examination, noted in this lecture, are, in reverse order, (*c*), weak respiratory murmur, and prolonged expiration, "due to want of normal elastic recoil of the air cells, and to debility of the respiratory muscles, (*b*), "a less clear per-

cussion note than pertains to a healthy chest, from want of elastic resiliency of the alveoli of the lungs—one of the wide-spread errors of nutrition which is so markedly characteristic of the tubercular diathesis," and (*a*) diminished movement of the chest wall, "equal on both sides, but perfectly restored by full and forcible inspiration." This, also, the learned author traces "to debility of the moving powers of the parietes," already referred to. Structural lesion is certainly necessary to the production of characteristic physical evidence of disease; the symptoms mentioned by Prof. Armor, as belonging to the precursory stage of phthisis, arise from ennervation, and as he himself says, from mal-nutrition—this, possibly, on other causes besides the tubercular diathesis, and sometimes associated with hystero-neurosis, and anæmia. I believe that we can, only by inference, decide a tubercular diathesis, prior to actual invasion; the circumstantial evidence, however, is often so strong that the local determination of disease may be recognized in its very incipiency, if not entirely resisted.

III. *In phthisis the antero-posterior diameter in the infra-clavicular region after forced inspiration is greater on the healthy than on the diseased side.*—This proposition is so theoretically reasonable that argument is almost needless. The objection may be raised that the lungs are enclosed in a case, the walls of which are fixed by the ribs so that a slight difference of respiratory function would not be shown on the chest surface. This objection does not hold good so long as the costal cartilages are not ossified, and not always then. The ribs move to a certain extent freely —each independent of any bony connection with another. The ribs are the springs, as it were, which, after being pushed upward and outward by the inspiratory effort, recover their natural position through their own elasticity. If the lung power within is deficient this movement is impaired, and as the ribs are connected by yielding structures, there would be diminshed movement of the ribs which encircle the plane of that portion of the lung in which is the disease.

IV. *Conversely the diameter of these points after forced inspiration is greater upon the diseased side.*—After an ordinary expiratory effort there still remains in the lung a certain amount of residual, which can be partly displaced by muscular power. When

this residuum cannot be forced out, as in emphyzema, or when there is a want of elasticity by reason of the envolvement of the alveolar walls, or when there is infiltration, compression of the lungs cannot be accomplished as readily as in health. This rule cannot apply to advanced stages of phthisis, for where there has been great destruction of tissue the chest wall may sink in, while there may be compensatory action and consequent unnatural fullness of the healthy side.

By combining this proposition and the preceding one, we conclude that the direct measurement of a diseased lung as compared with a healthy one, is less on inspiration and greater on expiration, or in other words, that the surface of the chest over the seat of disease moves through less space than does the corresponding surface of the other side. This is all the more valuable if we admit that phthisis is at first (in its local expression) a unilateral disease.

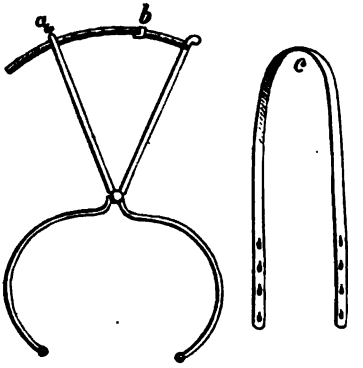
V. *Age, sex and habit of life may modify the amount of chest expansion, but only disease (or deformity) can make any marked difference in the movement of the two sides.*—In old age the costal cartilages become ossified and the bony framework of the chest is more nearly a unit. This serves as a guard against accident at a period when the ribs have lost their elasticity, when, if each rib were as free to move as at an earlier age there would be more danger of traumatism. Sex has also an influence in determining the amount of movement at the apex. The female, by reason of her physical formation, and from changes peculiar to her sex, depends to a greater extent upon the upper part of her lungs and less upon so-called abdominal respiration than the male. Habit of body, occupation, stature and many other conditions tend to develop or hinder the development of the chest. Mountaineers as a rule have markedly prominent chests, clerks and bookkeepers the contrary, yet these circumstances of life exert an almost equal influence upon the two lungs. Disease alone or that which proximates disease is unilateral.

VI. *Disease may be suspected where the difference in the expansion if the two sides at the apices is very small.*—If it is true that in health the expansion of the upper part of the lungs is equal; if this symmetry is destroyed by disease; if in phthisis the first local invasion is generally at the apex of the lung, and only at

one apex, it follows that in the absence of deformity or the evidences of mechanical obstruction to respiration, such as an aneurism, pleuritic adhesions, or intra-thoracic tumor, a diminution of movement at one apex, however small, points pretty directly to phthisis.

If these propositions are true it is evident that no examination of the chest in suspected or incipient phthisis can be complete without careful measurement of the chest movements. DaCosta[1] says "these minute measurements, however interesting to the physiologist, have as yet not been made available to the physician. Inspection teaches us the same as mensuration. What it teaches with less precision can be learned for purposes of diagnosis with a graduated tape." To this we must object. Mensuration is necessary, 1st, to determine the amount of movement. 2d, to estimate the comparative movement most im-

Fig. 1.



portant in every examination of the thorax. 3d, to render a concise record for future reference possible. Furthermore a graduated tape cannot readily mark slight differences of movement. The form of the chest is such that at the apices, and as low as the third rib, the antero posterior diameter may be materially increased by inspiration without greatly adding to the circumference. The increase in circumference when a given amount of air is inspired varies in persons having the same lung capacity; the increase in diameter has a more definite ratio.

For these reasons I have long since discarded the measuring tape, and use instead calipers (Fig. 1), moving easily and furnished

1. Medical Diagnosis, p. 201.

with a scale on one side reduced to 1-20 of an inch—on the other to millimetres. Corresponding points on each side of the chest anteriorly and posteriorly are marked in ink, and the arms of the instrument are supported at these points, passing through a band (*c*) which is thrown across each shoulder in turn. On deep expiration, a slide (*b*) is placed by the movable arm (*a*), and on inspiration the arm is fixed by a set-screw. We then have the diameters on expiration and inspiration, as well as the extent of movement. The same observations on the other side enable us to readily compare the measurements and movements. To make the amount of air at each movement equal, a spirometer may be used, though rarely necessary.

The practical value of this may be estimated by the following measurements, in a few cases where the calipers were *first* used, and the indications so found were *afterward* confirmed by the ordinary means of diagnosis:

SEX.	AGE.	INSPIRATORY MOVEMENT.		PRESENT DURATION OF DIS.	DIAGNOSIS.
		R. LUNG.	L. LUNG.		
Male ..	37	0.5 in.	0.35 in.	3 months	Phthisis, left apex.
Male ..	39	0.35	1.0	6 "	" right "
Male ..	42	0.5	0.7	9 "	" right " (left slightly involved.
Female	48	0.3	0.5	18 "	Dulness and prolonged expiration at right apex.
Male ..	29	0.05	0.2	6 years.	Cavity right apex.
Female	29	0.85	0.7	2 "	Dulness and cavernous respiration—left apex.
Male ..	23	0.7	0.7	.....	Normal.....
Female	21	0.4	0.35	.....	" .....
Female	28	0.4	0.4	.....	" .....
Male ..	36	0.45	0.5	.....	" .....

Translations from the French.

NEW MODES OF SURGICAL TREATMENT. ("Histoire de la Chirurgie Française" par le Docteur JULES ROCHARD. Edit. 1875, pp. 639, *et seq.*) Translated for THE JOURNAL by B. A. WATSON, M. D., Surgeon to Jersey City Charity, and St. Francis' Hospitals, Jersey City, New Jersey.

II.—ANTISEPTIC TREATMENT.

1st. GLYCERINE.—The first serious attack which was directed against the classic treatment, so dear to the hospital routine, goes back as far as 1855, at the time when glycerine made its appearance as a therapeutical agent. No person certainly would suppose that this substance, to which Scheele has given the name "sweet principle of oils," and which was scarcely known except by its negative properties, could become a preservative against the most formidable complication of wounds, but it was, however, by the cure of hospital gangrene that it first became known. It had already been in use ten years in England; Yearsley, Wakley and Turnbull had employed it in the treatment of diseases of the ear in 1845 and 1846; sometime afterward Taylor employed it in diseases of the eye, and Scott Alison in those of the larynx and trachea. In 1841, a French physician, Dallas, residing in Odessa, also had recourse to it in baths and frictions in the treatment of some cases of gangrenous wounds. These facts were scarcely known in France, when in 1854, Cape read before the Academy of Medicine, a memoir on glycerine and its application in the various branches of the medical art. Influenced by these facts Trosseau determined to employ it in his practice. He was imitated by Cazenave, Aran and Bazin, who obtained good results with it. The following year Demarquay resorted to it in an epidemic of hospital gangrene, which occurred at Saint Louis, and the success surpassed his expectations. Encouraged by this beginning he extended this method of treatment to all wounds in his practice, and recognized in it such advantages

that he hastened to communicate them to the Academy of Sciences and to the Academy of Medicine.[14] A month afterwards Denonvilliers, in whose service the trials had been made, rendered a very favorable report to the society on surgery. The superiority of the new agent over the cerates and the greasy bodies appeared to him to be demonstrated by the cleanliness and the maintenance of a healthy condition of the wounds, by their cicatrization and the facility of the treatment. He had obtained with it equally good results in the treatment of chancres, venereal buboes, fistulous tracks and ulcerations of the neck of the uterus.[15]

Thus patronized glycerine could not fail to make its way rapidly. It was not slow to enlarge its circle of applicabilities and for some time glyceroles of every description continued to multiply. There were glyceroles of starch, of tannin, and of iodine, and liniments and eye-washes, which had glycerine for their basis. It was even administered internally as a solvent of some liquids insoluble in water. In 1859 Demarquay recapitulated in a long memoir[16] all the uses to which glycerine had been put up to that time, still enlarging upon the praises which had been lavished upon it. The reading of this address gave the measure of the reputation that this substance had acquired, and showed by what exaggerations the best minds may suffer themselves to be carried away when an object of their predilection is in question. Glycerine was then presented as a kind of panacea, as an almost certain prophylactic in erysipelas, purulent infections, hospital gangrene and all the accidents that might follow gunshot wounds. It is the very best antiseptic with which the further progress of gangrene can be opposed, whatever may be its cause; it is the most precious topical dressing which can be carried to the bottom of sinuses, cold abscesses, in which it modifies advantageously the diseased surfaces. All this by opposing itself to the alteration in the pus. It renders the greatest service in the treatment of burns, ulcers, chancres, balanitis

14. Demarquay, Note sur les advantages du pansement des plaies par la glycerine. (*Bulletin de l'Academie de Medicine*, Sèance du 23, Octobre 1855, t. xxi, p. 96.)

15. Sèance de la Société de Chirurgie du 24 Novembre, 1855. *Bulletin de la Societé*, t. vi, p. 271.

16. Demarquay, Memoire sur la glycerine et les applications à la Chirurgie et à la medicine. (*Gazette Medicale de Paris*, 1859, p.p. 380, 401, 411.)

blennorrhagia, cutaneous diseases, lupus, herpetic affections of the vagina and uterus, etc. It was soon known to what extent these marvelous properties could be depended upon. Experience has reduced them to the proper value. It proved that this topical anodyne has over cerate the advantage of maintaining the wounds in a remarkable state of cleanliness, but that it drys very promptly in spite of its hygrometric properties.[17] In regard to its antiseptic qualities, in regard to the power that was attributed to it at first to conjure away erysipelas, purulent affections, and hospital gangrene, these are delusions which it has been necessary to overthrow, and glycerine has long since taken the modest rank in therapeutics which nature has assigned to it.[18]

2ND. DISINFECTANTS.—The *Gazette Medicale* had scarcely completed the publication of the memoir, in which Demarquay raised to glycerine a too perishable monument, of which we have just given an idea, when there appeared a rival substance which soon caused the other to be forgotten.[19] The disinfecting powder of Corne and Demeaux was first brought before the Academy of Sciences by Velpeau, in whose service these two practitioners had experimented with their preparation.[20] The results which they had obtained were as encouraging as possible. In all the cases where they had employed the mixture, the disappearance of the odor had been instantaneous. Gangrenous wounds, cancerous ulcers, ulcers of the legs, pieces of linen bandages soaked in fetid pus, infected liquids, or detritus formed in sphacelated tissues, lost immediately by this contact their deleterious odor. The action of this substance seemed to arrest the progress of decomposition. It kept away the insects and pre-

17. (Benjamin Anger, Pansement des plaies chirurgicales, thèse pour l'agarégation, Paris, 1872, p. 124.)

18. (*Bulletin de l'Academie*, t. XXXV, p. 742. Séance de l'Academie de medicine du 4 Octobre 1870, et de la societe medicale des hospitaux du 8 Octobre, 1870.)

19. La dernière partie du travail de Demarquay a paru dans le numéro du 2 juillet, 1859, et c'est à la séance du 25 juillet que Velpeau fit à l'Académie des Sciences sa communication sur la désinfection et le pansement des plaies. (Compte rendus de *l'Académie des Sciences*, 1859, t. xlix, p. 145.)

20. La poudre Corne, medicine vétérinaire, et Demeaux, ancien interne des hôspitaux de Paris, est un mélange de 100 parties des plâtre en poudre et de za 3 parties de coal tar, qui est, comme du le soit, le produit liquide de ta distillation de la huille pour le fabrication du gaz d'éclairage.

vented the production of organisms. A great number of hygienic or industrial applications of it had been made. This communication was made July 25, 1859[21] and produced a sensation. All the medical journals reproduced it with accompanying comments; surgeons, veterinary surgeons and chemists began to study and experiment with the new therapeutical agent which became known at this time and responded to the aspirations of the moment. The first reports confirmed the results commenced by Velpeau, and Bouley signalized the perfect concordance of the experiments made at Alfort with those which had taken place at the Charity. The chemists had little trouble to demonstrate that the study of disinfectants was not new; that it had been during all time a subject which had engaged the minds of hygienists and physicians, and that a great number of substances long known possessed the property of causing the disappearance of the odor of putrid animal matter. They recalled to mind the fact that charcoal powder, the chlorides of lime, soda and potash, coal tar, the product of the distillation of wood, the salts of lead, etc., had been sucessively employed for this purpose, and with complete success.[22]

Finally at the meeting on the 1st of August, 1859, Renault reported his experience on the action of plaster of Paris and coal tar mixtures in different proportions; and those of different kinds of charcoal, spirits of turpentine, oil of slate and creosote. It was known that all these substances had the effect of causing to disappear the disagreeable odor of putrefying animal matter, but by substituting for them their own special odor, and that the least disagreeable of all was that of tar which he proposed to substitute for coal tar.[23] The Academy of Sciences had devoted several meetings to the careful study of this question when it received from Marshal Vaillant, at Milan, two letters,[24] the first dated thirteen days earlier than the second, in

21. (Compte rendus de *l' Académie des Sciences*, 1859, t. xlix, p. 127.)

22. Communications de chevreul et Bussy á l'Académie des Sciences, Séance 25 juillet, 1859. (Comptes rendus, t. xlix, p.p. 147, 157.) Voyez, pour l'historique des desinfectants, le travail public par le docteur Ossian Hemy fils dans les *Archives Générales de Médicine*, 1859, 5th serie, t. xiv, p. 459.

23. Renault, emploi dans le traitement des plaies et ulceres de diverses on de masquer la puanteur. Comptes rendus de *l'Académie des Sciences*, t. xlix, p. 194.)

24. Ces deux lettres sont inerees dans le tome xlix, pages 226 et 285 du

which he reported the trials made in the army in Italy in accordance with a desire expressed by Velpeau, and also in obedience to instructions left by Baron Hippolyte Larrey on his departure for Genoa. Twenty wounded Austrians had been treated at the hospital San Francisco, by the physician-in-chief, Cuvellier, and the disinfectant properties of the new medicinal agent had been recognized at Milan, the same as at Paris. The next year the Marshal addressed to the learned society a report of Doctor Jacquemot, in which he praised strongly the powder of Corne and Demeaux in hospital gangrene.

Jacquemot had tried it successfully on the wounded Austrians and he gave his preference to it over iodine and the perchloride of iron.[25] In the interval, the Academy had received new communications on the same subject. Sirus Pirondi had sent them from Marseilles a series of equally favorable observations; Simon had employed the disinfecting powders with success on the workmen in the collieries of Rouchamps (Haute-Suone), in cases of large burns, in sanious or putrescent wounds, and analogous results were obtained by Isambert and Bertherand in their respective services.[26] From surgical therapeutics, the disinfecting powder had passed into the domain of public hygiene and rural economy, by undergoing some modifications in its composition. Notes on this subject had been addressed to the Institute by Moride,[27] Burdel[28] and Cabanes.[29] The Academy of Medicine, however, occupied itself with a problem, the practical interest of which did not escape it. Since 1859, it had brought before the meeting the question of disinfectants and their application to therapeutics; and in 1861 it divided the prize between P. Chalvet and Reveil.[30] In the meantime, the reputation of

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Comptes rendu des seances de *l'Académie des Sciences*. La primière est du 3 août la seconde des 16 août, 1859.

25. Comptes rendus 1860, t. l. p. 676.

26. Voyez le Rapport de Velpeau a l'Académie des Sciences, Comptes rendus, 1860, t. l. p. 279.

27. Comptes rendus de l'Académie des Sciences, 1859, t. xlix, p. 242.

28. Ibid, p. p. 298-408.

29. Ibid, p. 445.

30. Séance Publique annuelle du 17 Décembre, 1861, rapport de Charles Robin. (*Bulletin de l'Académie de Médicine*, t. xxvii, p. 212). Le travail de Chalvet a pour titre; Des désinfectants et de leurs application, a la thérapeutique et de l'hygiene, il a paru dans les mémoires de l'Académie de Médicine, t. xxvi.

the powder of Corne and Demeaux reached its limit. The trials made in the hospitals had established the fact that it neutralizes the odor of pus only by absorbing it, and that it absorbs only a very small quantity; that the liquid remaining under the crust formed by this mixture, retains all its disagreeable odor; that the applications ought to be renewed very frequently, and that this gray powder deprives the treatment of every character of cleanliness.[31] It was not slow, therefore, to be abandoned; but the movement had gained a firm hold; each one continued to follow up the solution of the important problem which had been raised. The researches continued with an increasing ardor. Never had the Academy of Science received so many communications on a surgical subject. At first it was well-known therapeutical agents, whose claims were put forward. Marchal (de Calvi),[32] and Boinet,[33] supported the claims of iodine, on the ground which had long been recognized; the perchloride of iron, which, six years before, had made so brilliant an entrance into surgical therapeupeutics, and supplanted at the same blow all hemostatic liquids of renown, was presented by A. Terreil and by Delean, as an excellent disinfectant, by virtue of its coagulating properties.[34] The chlorate of potash, which had been considered for some time an antidote for phagedena, was extolled in its turn by Billiard of Corbigny.[35] Finally, coal tar reappeared in a new form and relieved of the inconvenience which had been a reproach to it, in an excellent preparation known under the name of "Coal tar Saponine," with which Lebeuf, a pharmacist of Bayonne, had enriched therapeutics.

COAL TAR SAPONINE.—Lebeuf had, five years previously, presented to the Academy of Science, an interesting work on the alcoholic tincture of Saponine. He had discovered that saponine, soluble in water and in alcohol, possessed the

31. Bonnafaut, Expériences faites a l'infirmerie de l'hôtel des Invalides avec la poudre disinfectante de coal tar et de plâtre dans le service des blessés. (Comptes rendus de l'Académie des Sciences, 1859, t. xlix, p. 348.]

32. Comptes rendus de l'Académie des Sciences, 1859, t. xlix, p. 342 et Union Medicale, 1859, t. iii, p. 276.

33. Comptes rendus de l'Academie des Sciences, 1859, t. xlix, p. 298.

34. Comptes rendus de l'Academie des Sciences, 1859, t. xlix, p. p. 265-263.

35. Billiard de Corbigny, De la destruction absolue de l'odeur de gangrene, au moyen du cnlorate de potasse. Comptes rendus de l'Academie des Sciences, 1859, t. xlix, p. 471.

property of maintaining in suspension in water all bodies which are soluble in the alcohol at 90 degrees, and he had utilized this property in making emulsions of the balsam of tolu and of Peru, castor oil, coal tar, gum quiac, the oleo-resin of copaiba, etc.[36] When the reputation of the powder of Corne and Demeaux had overspread the whole of France, and it had been fully demonstrated that it was to the coal tar that it owed its disinfecting properties, Lebeuf thought that it would be possible to make an emulsion of this product, by the aid of the alcoholic tincture of saponine, as he had done previously with the other substances which we have enumerated. He obtained thus a preparation, which formed with the water a very stable emulsion, and the employment of which presented none of the inconveniences of the powder of Corne and Dumeaux.[37] The alcohol extracts from the coal tar its active principles; it unites to this its own antiseptic properties; the saponine, its solvent actions are fatty bodies, and the emulsion which contains these three advantages, penetrates the tissues, mixes with the pus and all the morbid secretions, disinfects them, and at the same time washes them away.

Such at least, are the conclusions of a memoir presented to the Academy of Science, June 25th, 1860, by Lemaire.[38] Experience has confirmed his assertions, and coal tar saponine has taken rank with the most precious dressings that we can use in the treatment of wounds of a bad character. It has been employed under our own eyes at the hospital at Brest, on nearly a thousand wounds during the late war, in competition with other antiseptic dressings, and the superiority has remained with it.

ALKALINE CARBOLATES.—CARBOLIC ACID.—The question of disinfectants had, as is seen, already made its way, when on the 6th of February, 1860, Velpeau, reporter from the commission which had been appointed at the commencement, gave the details of their long labor to the Academy of Sciences. However,

36. Ferdinand Lebeuf, Recherches sur la Sapouine. Comptes rendus de l'Academie des Sciences, 1850, t. xxxi, p. 652.

37. La teinture alcoolique de coal tar saponine. (Coal tar, 1,000 grammes teinture alcoolique de saponine, 2,400). ne s'emploie pas pure. Pour obtenir l'emulsion destinèe aux pansements, on la mèlange a l'eau dans la proportion dún quart.

38. Lemaire Du coal tar saponine et de san emploi. [Comptes rendus de l'Academie des Sciences. 1860, t. 1 p. 1178]

whilst manifesting in favor of the powder of Corne and Demeaux, a predilection which was not fully shared, he finally, in conclusion, urged the necessity of new researches.[39] His appeal was listened to attentively, and the communications continued. Boboeuf was the first who, however, in raising a demand for priority for which we need not stop, came to propose, as a substitute for coal tar, the alkaline carbolates, of which the solutions are always identical, while the composition of the former is essentially variable.[40]

The carbolate of soda (phenol Boboeuf,) had been experimented on by Devargie, who recognized in it the qualities of a good preparation. The employment of the carbolates would have naturally led to the use of carbolic acid, to which the coal tar, creosote, and the greater part of the disinfecting substances or parasiticides owe their property, if this last had not preceded it. Lemaire, however, in making his researches on coal tar saponine, had made like experiments on the effect of carbolic acid, and he communicated to the Institute, on the 14th of March, 1861, the result of his experiments.[41] Since that time, the knowledge of carbolic acid has spread everywhere, and it has acquired in hygiene and therapeutics, in France and in foreign countries, a reputation which it still maintains.

In 1865, Déclat addressed to the Academy of Sciences of Paris, a note in which he presented it as a true panacea. Since that time he has used it as a sort of specific for cancer, and he has just established a journal to celebrate its virtues.[42] Its use is vulgarized in the hospitals of London. Lister has adopted it in an exclusive manner. His antiseptic treatment has acquired a certain celebrity, and has been experimented with at different times in the hospitals of Paris, and has undergone in his hands, various modifications; but he always rests essentially on the parasiticide property of the carbolic acid, which he employs under all the varied forms. He operates in an atmosphere

39. Velpeau, Rapport sur divers moyen disinfectants. [Comptes rendus de l'Academie des Sciences, t. 1 p. p. 279, 302.]

40. Sèance de l'Academie des Sciences du 9 juillet 1860. [Comptes rendus, t. li, p. 61].

41. Lemaire a fait paraitre, la même annèe, dans le *Moniteur des Scienees*, un long mèmoire sur le même sujet, et en 1763, il a rèuni tous res travaux dans un ouvrage spècial.

42. La Médicine des ferménts (directeur gêrant, docteur Dêclat) a commènce a paraitres au moi d'avril, 1874.

charged with the spray of carbolic acid, the instruments, the hands of the surgeon and assistants, the ligatures, the pieces of dressing,—everything which touches the patient is soaked in carbolic acid, and not a septic germ can escape it.[43]

The carbolic acid is also highly honored in Germany, at Leipsig. Prof. Thiersch habitually uses it. During the late war, there was a tremendous consumption of it. Is carbolic acid at the height of its fame? This is a question that the future will settle; its parasiticide properties are incontestable; it arrests all fermentation and destroys all organized germs, microphytes or microzoaires; then these elements play such a role in the origin of infectious diseases, that one will not be surprised at the importance acquired in therapeutics by a substance which possesses, in so high a degree, the power to destroy them.

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43. Pour le pansement de Lister, voyez J. Holmes, a system of Surgery, vol. v, p. 617, London, 1871. Wailuit par F. Terrier, in Archives generales de Medecine. Novembre, 1871, 6 series, t. xviii, p. 623. Pour san emploi dans les hôpitaux de Paris: Pansement des grandes plaies par le préparations pheniques (mèthode de Lister), in *Gazettè dés Hôpitaux*, 1869, p. 465.

Translations from the German.

PATHOLOGY AND THERAPEUTICS IN OPHTHALMOLOGY. [Taken from Prof. NAGEL's *Jahresbericht ueber die Leistungen und Fortschritte im Gebiete der Ophthalmologie.*] By S. POLLAK, M. D., Surgeon to the Eye and Ear Infirmary of the Saint Louis Hospital.

DISEASES OF THE CONJUNCTIVA.

CRITCHETT, (*Ann. d'ocul.*), under the title of superficial affections of the eye, describes two forms of conjunctivitis, and the accompanying corneal trouble, viz.: the simple and the catarrhal forms. To the first form belongs also that known as conjunctivitis-phlyctænulosa. The treatment of these two classes is essentially different. In simple conjunctivitis, irritating astringents are injurious, and caustics dangerous. In photophobia, which is pathognomonic in phlyctænular keratitis, he chloroforms his little patients; uses atropine; repeats this three or four times in an interval of three or four days, with good results. In vascular ulcerations, he uses successfully, setons of a few silk threads in the temples. But in catarrhal conjunctivitis or purulent ophthalmia, astringents and caustics are indicated. [This classification of Mr. Critchett is not generally accepted. The treatment of phlyctænular ophthalmia is as different from the simple conjunctivitis, as the latter is from the muco-purulent or catarrhal ophthalmia.]

LAWRENCE (Etiology and treatment of scrofulous ophthalmia, *Medical Press and Circular*) supposes the initiatory point of phlyctænular ophthalmia to be in super-cervical ganglion of the sympathetic. Therapeutically he recommends to correct digestion by an occasional mercurial cathartic, a plain diet, principally milk, but little meat. Cod liver oil is not suitable in all cases; it acts injuriously on children of torpid habits with thick upper lips and nose; but lean patients with quick pulse, excitable temperament, are much benefitted by cod liver oil. Photophobia is

lessened by bromide potass, and later, by quinine. Fresh air is above all things necessary. Cold shower bath in summer, tepid sea bath in winter are invaluable remedies. Locally, warm fomentation, with an infusion of poppy seed. After the subsidence of the acute symptoms, the poppy seed fomentation can be made cooler, and at last, it may be applied quite cold. Linimentum iodii, penciled on the mastoid process, is preferable to the cantharidal ointment. Nitrate of silver to the conjunctiva is dangerous; solutions of atropine are not as useful as the fomentations with infusion of poppy seed. Ferruginous tonics are indicated in anæmic patients only. Much benefit has been derived from the constant current.

FENNER (*Am. Practitioner*) describes phlyctænular conjunctivitis, or strumous ophthalmia, from a clinical standpoint, and urges the necessity of constitutional treatment of scrofulous children. He recommends mercurials as most effective.

THIRY (*Presse Medicale*) reports a clinical case of conjunctivitis gonnorrhoica. The infection was caused by washing a prurient eye with urine. He recommends, particularly, the enlargement of the palpebral commissure by canthotomy. He makes a distinction between ophthalmia blennorrhoica, infected by the specific virulent product of acute urethritis, and the simple acute blennorrhœa. In the first, caustics are indicated; in the second, tannin.

BARDE (*rapport surl'hopital ophthalmique à Geneve*) chloroforms all little patients suffering from ophthalmia blennorrhœa, in order to make a thorough and satisfactory examination of the eye, and the necessary application to it.

SCHIESS (*corresp. Bl. f. Schweizer Aerzte*) lays great stress on the prophylaxis, in the treatment of blennorrhœa neonatorum. He insists that obstetricians should be required to wash and cleanse the eyes of all the new-born with some disinfecting fluid, such as ½ per cent solution of carbolic acid, or $\frac{1}{10}$ per cent solution of thymol, or of aq. chlorii. In very acute inflammation, at first only cold should be applied; all collyria avoided, except it be atropia in corneal stains. Only after the subsidence of the tumefaction may the lapis mitigatus be used.

AYRES (*Cincinnati Lancet*) institutes comparisons between the result of treatment of 100 cases of ophthalmia neonatorum, in the Cincinnati hospital, and as many cases in private practice. Of the latter only 58 escaped corneal opacities; 6 on both eyes; 5 were blind on one eye. Of the first not a single case of opacity of the cornea occurred—all got off with good sight. He recommends the eyes of the new-born to be washed first, that is, before the rest of the body be put in the water. The local treatment was the usual: cleanliness, fomentation, nitrate of silver of various strengths.

LEWIN (*Berliner Klin. Wochenschrift*) tries to prove that not all cases of gonnorrhœal ophthalmia are the result of infection, by direct contact with gonnorrhœal virus, but may be the product, like gonnorrhœal arthritis, by a connection of a vaso-moter reflex neurosis.

PIERD'HONY (*Annali di Ottalm*) again recommends the treatment of granulation with finely pulverized acetate of lead; a practice which has become obsolete. He claims it effects a cure(?) quicker than other remedies, especially with such patients that cannot be seen daily. The lids have to be everted, carefully and thoroughly dried, and the powder applied with a camels hair pencil. [Having seen many favorable results of this treatment in Europe, I tried it here, in the clinic, quite frequently, but without realizing always the good results that I anticipated. Only in anæmic patients, with lax, flabby lids, large trachoma, and perfectly clear cornea, it proved quite satisfactory. A deposit of lead had gradually been made over the palpebral conjunctiva, which, in a measure, compressed the granulations, and formed a smooth surface, covered with an epithelium. I have watched such patients for years, without finding the least change in the glistening, white, well-moistened surface of the everted lid; but it entirely failed in many more instances, under apparently quite similar conditions; even causing considerable irritation, and much discomfort, by its astringent properties—S.P.]

QUAGLIANO (*Annali di Ottalm*) recommends frequent and thorough scarifications in conjunctivitis granulosa, with a five-bladed crescent scarificator.

WOLFE (*Medical Times and Gazette*) considers granular conjunctivitis as a higher degree of the catarrhal conjunctivitis.

Both may be assumed to be a traumatic erysipelas of the conjunctiva, caused by small floating particles of dust. In the first stadium, he recommends warm fomentations, which, by their increasing the secretion, tend to the elimination of the foreign bodies. The lids are then ectropized, the granulation deeply incised, and the contents of which pressed out with the fingers. Atropia is then instilled, and the eye bathed 3 times a day with a solution of borax. The incisions may be repeated in 2 to 3 weeks. In the meanwhile, the ectropized conjunctival surfaces have to be rubbed against each other every day, in order to crush all the remaining granular deposits. This manœuver has to be followed up by brushing them over with the syrup of tannin (acid. tannici ʒij, syrupi simpl. ʒi). He refers to three cases, on whom, afterwards, operations for cataract and iridectomy had been successfully performed.

TERRIER (*Archives Gén. de Med.*) saw, in a healthy woman of 64, a *double Xerosis, conjunctivæ et corneæ*, with symblepharon and entropium. When, three years previous, this affection began to manifest itself in the left eye, a *psoriatic* exanthema was seen on the knee and elbow; the lids were never trachomatous. The disastrous termination of the case justifies the conclusion that a species of psoriasis had affected the conjunctival bulbi.

SIMEON SNELL (*Lancet*). A peculiar appearance of the conjunctiva in some cases of night blindness (hemeralopia). He found on the conjunctiva on both sides of the cornea, or only on the temporal aspect of the same, a gray glistening spot, consisting of a series of small vesicles, which were movable with the conjunctiva, obliterable by compression, but return after a few hours; the epithelium did not appear thickened. This phenomena came and went with the hemeralopia. The fundus showed nothing abnormal, only occasionally a little veiling of the blood-vessels. *Pupil mostly dilated.* It affected only children, and, strange to say, only the well-to-do and healthy ones, with whom no possible cause could be assigned. Relapses were frequent. Snell never found this form absent in simple hemeralopia. He believes this affection had never been described, and is entirely different from that mentioned by Bitot and Soelberg Wells. He relates several cases, among which a family of 5 children of from 3 to 10 years of age, who were affected simultaneously.

LASKIEWIEZ (*Klin. Monatsblätter*) describes a peculiar and rare form of conjunctival disease. It appeared originally as a granular ophthalmia, which, through favorable circumstances, lead to a colossal degeneration, resembling a hyperplasia of the conjunctival tissue, with hypertrophy of the tarsus and chronic dermatitis. The red granular excresences were frequently radically removed, so that it resulted in adhesion of the bulbar and palpebral conjunctiva. The microscope revealed, in this mass, all the elements of a mixed trachoma; giant cells also were seen. It is strange that the patient, a woman of 32, had only the left eye affected, while the right eye remained sound.

PFLUEGER (*Klin. Monatsblätter*) observed a primary *lupous degeneration of the conjunctiva* of the left upper lid, which had existed 6 months, and caused partial destruction of the tarsal margin. By puncturing with Wecker's tattooing instrument, and touching with lapis, the destructive process was arrested. A similar lupous ulcer was found behind the ear, but which came after the same disease had existed in the eye.

TAYLOR (*Med. Times and Gaz.*) has devised a new and effectual method of treating (so-called) incurable cases of *symblepharon*. After carefully dividing the adhesions, a correspondingly long, horizontal flap is cut out of the skin of the affected lid, the nasal end remaining undivided. The flap is turned over, a vertical incision is then made, through the orbicularis, tarsus and conjunctiva. The flap is drawn through this opening into the conjunctival sack; its raw surface is adjusted to the palpebral surface of the symblepharon and secured by silk sutures. The epidermic surface of the skin is opposite the raw surface of the bulbus. The vitality of the flap is maintained through its attachment on the nasal side. The skin in the conjunctival sack gradually assumes the properties of a mucous membrane.

IMRE (*Klin. Monatsblätter*) *transplanted* twice the *conjunctivæ* of *rabbits* in cases of symblepharon anterius. In the first operation, the mucosa of the rabbit did not entirely cover the cut surface, yet adhesion took place; but after ten days the center of the flap was raised; the margin appeared swollen. Gradually the transplanted membrane grew smaller, shrunk up to a mere bridle, which had to be removed with a knife. A second attempt was made with no better result.

WECKER (*Clinique Ophthal.*) tried transplanting of the *human* conjunctiva in cases of symblepharon, with no better result than that of the rabbit.

KLEIN (*Allgem. Wiener Med. Zeitung*) transplanted the conjunctivæ of rabbits in cases of *pterygium*. Adhesion was effected, but the pterygium, which had only been turned over, grew over the transplanted mucosa. Total removal of the pterygium would probably have been better.

FENNER (*Wiener Med. Collegium*) transplanted the conjunctivæ of a rabbit after the removal of a conjunctival tumor. Shrinkage began after a seeming success of four weeks. Fenner intends to experiment hereafter with the thicker mucosa of the lips or vagina, as Stellwag did, or with the skin, as Arlt did.

SWANZY (*Med. Press and Circular*) succeeded in a case of transplantation of the conjunctiva of the rabbit to the eye of a lady who had worn an artificial eye so long, until the enamel had been rubbed off, causing by its irritation cicatricial adhesion of the edges of the lids (anchyloblepharon) near the outer commissure. Swanzy cut the band out, covered the wound of the upper lid with a flap 3 cm. square of the conjunctiva of a rabbit, by seven sutures. Adhesion was complete in one week. The two mucosa could not be discerned from each other with the strongest loup lens.

WOLFE (*Lancet*) and SCHOELER (*Klin. Jahresbericht*) report likewise successful transplantation of the conjunctiva of a rabbit to the human eye, for various causes. [They fail, however, to state the appearance of the flap after 4 to 6 weeks; whether or not skrinking had taken place, and thus determine the practical value of the operation.]

Proceedings of Medical Societies.

MACOUPIN COUNTY (ILL.) MEDICAL SOCIETY.

The second regular quarterly meeting for 1879, of the Society of Macoupin County for Medical Improvement, was held in Brighton, Tuesday, April 15th. In consequence of the temporary absence of the President and Vice-President, Dr. Seaman was chosen Chairman pro tem.

Minutes of the last meeting were read and approved. Fifteen members present.

Dr. A. C. Corr proposed Dr. A. Gifford for membership. Referred to Board of Censors.

On motion of Dr. Brother the bill of the Secretary for printing, postage, etc., amounting to three dollars and fifty cents, was allowed.

The Secretary read a communication from Dr. R. J. Mitchel, regretting his unavoidable absence and requesting that he be continued as essayist until the next meeting.

The Board of Censors reported as follows: We find Dr. A. Gifford to have graduated from the St. Louis Medical College, the 12th of March, 1878. We have duly considered his application for membership and most cordially recommend his admission.

Moved by Dr. Clement that the report be accepted and that the Secretary cast the vote of the Society. Motion carried. Dr. Gifford was then duly elected and welcomed by the President.

The Committee on Programme reported as follows: Next place of meeting, Shipman; Essayists, Dr. R. J. Mitchel, Typhoid Fever; Dr. G. H. Gilson, Malaria; Dr. S. E. Bucknell, Tonsilitis. On motion the report was accepted.

The Committee on Nominations then named the following members of the Society for officers for the ensuing year:

President—Dr. W. C. Day.
Vice-President—Dr. J. R. Lane.
Secretary—Dr. G. H. Gilson.
Assistant Secretary—Dr. L. H. Corr.
Treasurer—Dr. W. J. Harris.

On motion the report was accepted and the gentlemen duly elected.

The following members were chosen by the Society as delegates to the State Medical Society: Drs. F. Brother, S. E. Bucknell, W. C. Day, F. A. Clement, M. W. Seaman, John Ash, F. F. Martin and A. Gifford.

Drs. J. R. Lane, R. C. Cowen, John Ash and R. M. Wilson were elected delegates to the American Medical Association.

The following resolution was adopted by the Society:

Resolved, That the delegates to the State Medical Society present the resolution on ethics adopted at our last meeting, to the Committee on Ethics of the State Medical Society and request that action be taken thereon.

On motion of Dr. Brother the following resolution, adopted sometime ago by the West Chicago Medical Society, was also adopted:

Resolved, That in the opinion of this Society it is the duty of the State Board of Health to procure an amendment to the law relating to the collection of vital statistics, securing the incorporation of those sections of the New Hampshire and Connecticut laws which provide for the compensation of persons who make returns of births and deaths, at the rate of twenty-five cents for each birth or death returned and recorded within the limits of the State.

Dr. Day introduced to the Society Dr. Reed, of Fidelity, Jersey County, and on motion the privileges and courtesies of the Society were extended to him.

Dr. Harris presented an interesting pathological specimen with the following history of the case: "I was called Sept. 15th 1878, to see Mrs. C——, a colored woman, about fifty years of age (a quadroon), who was suffering from very severe pains in the lower part of the abdomen, with a profuse vaginal discharge, dark, tarry in character with a very offensive odor. This discharge, she told me, had continued with occasional interruptions, for nearly two years prior to the present attack. The discharge was more profuse during her menstrual periods, after which it would gradually subside, being followed by a fetid leucorrhœal discharge that would last a few days or until the return of the menses, the periods varying from the beginning of one till the beginning of the next menstrual discharge from twelve to twenty days.

I will here state that I had attended this patient some eighteen months previously. At that time, on making a vaginal examination I detected a tumor as large as a hen egg, that fluctuated, situated to the right and posteriorly of the uterus. I diagnosed pelvic cellulitis. In a few days it discharged freely a thick offensive pus. On the present occasion a vaginal examination revealed the upper *vaginal wall* much thickened and indurated to the right posteriorly, drawing the cervix in that direction and causing the os to look to the right posteriorly with the anterior lip much elongated, so that it was very difficult to pass the uterine

sound. Having succeeded in passing it, however, the depth of the uterus was found to be two and a-half to three inches. Bimanual examination revealed much thickening of the tissue in the vaginal region, with enlarged lymphatics. There was also much tenderness over the bladder, with much vesical tenesmus; the bowels were much constipated, but were kept open with laxatives and enematas of warm water and castile soap. On several occasions large patches of mucous membrane passed with the dejections. As the result of my manipulations a general peritonitis followed, which yielded to treatment. In my treatment of the case I used sustaining remedies, quinine, arsenic, beef tea and wine internally, with local applications to the diseased tissues of carbolized injections of warm water, ergot and water, tinc. thuja accidentalis and water, each in succession.

Before commencing with injections I used a local application of tinct. iodine. My patient gradually lost strength, suffering all the time excruciating pain in her right thigh and knee, for the relief of which I gave hypodermic injections of morphia and sulphuric ether. After one of the injections of the ether there was much swelling of the right thigh and leg with a hard, cordy feeling. During some of those cold days in January she was exposed to a draft of cold air, and pneumonia rapidly developed in both lungs, from which she died on Jan. 22. Assisted by Drs. Ash and Reed we held a post mortem examination with the following results: All the pelvic tissues were enlarged, thickened and indurated; her pelvic organs were bound together by fibrous membranes. In the specimen presented to the Society, consisting of the uterus and its attachments, you will find the uterus and walls enlarged and very much indurated; also the sacks of three large abscesses, which were filled with a dark tarry fluid. The conditions of the other organs were found to be normal. The stomach and intestinal tract were not examined any further than their relation to the pelvic organs. I might mention that there was some history of something that was supposed to be cancerous in one of her aunts, who died with some malignant disease. I have purposely omitted my diagnosis in order that I might obtain the views of the members of this Society.

The specimen was carefully examined by all present and quite an earnest discussion ensued. A majority seemed to be of the opinion that the disease was malignant in its nature, while others contended that inflammation was alone responsible for the alteration of the tissue presented in the specimen.

On motion the Society adjourned till 2. P. M.

AFTERNOON SESSION.

Society called to order by the President at 2. P. M.

Dr. R. J. Lane favored the Society with a most excellent paper on the use of "Obstretrical Forceps."

Moved by Dr. Brother that the paper be received by the Society and submitted for discussion. Motion carried.

All the members present participated in the earnest and interesting debate which followed the reading of this admirable paper. After the transaction of some other business of a miscellaneous nature, the Society adjourned to meet in Shipman on the third Tuesday in July.

S. E. BUCKNELL, M. D.
Secretary.

THE SOUTHWESTERN KENTUCKY MEDICAL ASSOCIATION.

The Southwestern Kentucky Medical Association was called to order upon its sixteenth semi-annual meeting, in the City of Paducah, at the City Council Chamber, promptly at 2 P. M., Tuesday, May 20. Dr. James Hendley, of Farmington, the President, occupied the chair, with Dr. J. H. Morton as Recording Secretary.

After a cordial welcome expressed by the Chairman of the Committee of Arrangements, the Rev. K. B. Tupper commenced the proceedings by an eloquent and appropriate prayer.

The following physicians were present: Drs. C. H. Brothers, Maxon's Mills; T. C. Parker, Fulton; John L. Dismukes and D, J. Foster, Mayfield; E. M. Duncan and O. B. Withers, of Eddyville; Thomas Rivers, Hazelwood; B. T. Marshal, Woodville; C. W. Miles, Jordan Station; D. A. Maxwell, J. W. Becker, J. G. Brooks, J. W. Thompson, J. W. Singleton, W. J. Wilson, F. T. Davis, David Gardner, R. Saunders, Moses Rosenthal, S. H. Singleton, Paducah; J. A. Dodson, Dukedom, Tenn.; A. T. Hobbs and R. T. Hocker, Lowe's Cross Roads; W. S. Graves, Dycusburg; B. L. Hendley, Florence Station; W. W. Gilbert, Calvert City; R. J. Howard, Pryorsburg; M. H. Carson, Smithland; F. M. Usher, J. H. Norris, Metropolis, Illiniois; J. A. McNeel, Wingo Station; J. B. Payne, Lovelaceville; A. B. Whayne, Harris' Station, Tenn.; G. F. Weaks, Water Valley, Ky.; C. M. Sebastian, Martin Station, Tenn.; Charles Hinkle, Hinkleville; W. R. Dale, Murray; J. J. McGee, Symsonia.

The minutes of the December meeting at Fulton were read and adopted. They reflect great credit on the Recording Secretary, Dr. Mortin, and were heartily approved.

A Committee on Credentials was appointed by the Chair, consisting of Drs. J. W. Thompson, D. J. Foster and Charles W. Miles.

Dr. Charles Hinkle, of Ballard County and W. R. Dale, of Murray, were received as members.

The resolution that none but regular graduates can become members of the Society was re-affirmed by a large majority.

On call of special committees Dr. Singleton read a memorial biography of the members of the Association who have died in 1877 and 1878. Referred to the Publishing Committee. The following are his introductory remarks:

MR. PRESIDENT AND GENTLEMEN:—At our last semi-annual meeting, held in Fulton, December 4, 1878, I had the honor of being appointed Chairman of a Committee to prepare memorial sketches of the lives of the members of this Association who have died in the past three years, and especially of those who sacrificed themselves during the yellow fever epidemic of 1878. We realize the fact that the task assigned us is a difficult one, and though the melancholy duty is a labor of love, it is still difficult on account of the limited means at our command of obtaining full and authentic histories of our late brethren to whose sacred memory we would gladly do justice; for this is the governing aim and object of my humble effort on the present occasion.

It seems that in spite of the best directed efforts of medical science to prevent and cure disease and prolong human life, that very frequently those who minister at our altars are often among the first to be cut down in the ranks of this busy world.

Dr. W. J. Wilson, of Paducah, reported an interesting and important case, which was appropriately referred.

Dr. Singleton spoke to the society on post partem hemorrhage, and in reference to other points in labor. Dr. Norris, of Metropolis, and Dr. Graves, of Dycusburg, took part in the discussion. After the transaction of some miscellaneous business the convention adjourned to meet at 8 P. M.

NIGHT SESSION.

The Association was called to order at 8 P. M., by the President. The time for the election of officers having arrived, the following named members were chosen for that purpose during the ensuing year.

Dr. Charles W. Miles, President; Dr. W. W. Gilbert, Senior Vice-President; Dr. C. H. Brothers, Junior Vice-President; Dr. David Gardner, Recording Secretary; Dr. F. Davis, Corresponding Secretary; Dr. D. A. Maxwell, Treasurer, the two latter by acclamation.

The time and place for the next meeting of the Society was fixed at Eddyville, Lyon county, on the second Wednesday in November next.

Dr. Hendley, the retiring President, then delivered his address, which was a most excellent production. It did great credit to his head and heart, for it was full of good things from first to last. The following is a report of the address:

GENTLEMEN:—I design to-night to call your attention to some of the duties which we, as physicians, owe to ourselves, our fellow mortals and to each other; to the spirit which should animate our thoughts and aims, "not with enticing words of men's

wisdom," and present simple and unadorned facts and maxims, which I conceive to be of much importance to us as responsible medical gentlemen, who must render an impartial account of our stewardship to the Great Physician above.

He should be true and punctual in all the relations he sustains toward his brother physician; prompt in attending the meetings of the medical societies, following in this, the example of such eminent and distinguished predecessors as Drs. L. P. Yandell, Ewing, Reed, Eve, Lipscomb, and at least a hundred others, who over fifty years ago traveled on horseback one hundred miles to be at the meeting of the Tennessee State Medical Society, and who, by faithfully discharging their duties, promptly obeying the behests of the society, in reporting cases, reading essays, etc., learned new and important truths from each other, promoted kind and fraternal feelings, and thus they became renowned physicians and ornaments to the profession, and although most of them have crossed the cold river, have entered the spirit land, and have ceased from their labors, "yet their works do follow them." So may we, while enjoying the frequent privilege of discussing medical topics, cultivating good will, friendship and brotherhood, etc., also become, if not so distinguished as some of them, that which is as desirable—benefactors of our race. In conclusion, I must confess there is always a melancholy significance if not something akin to tenderness attached to even the most trivial circumstances. When we reflect it may be done for the last time; then how much so when our associations have been so fraught with benefit and pleasure.

Permit me also to congratulate you on the favorable auspices which surround you. At no period in the history of medicine have the labors of the medical student met with better success, and achieved greater results.

Whatever be our toils and trouble in this ever changing, ever varying world, let us meet them with fortitude, having our feet firmly planted upon the imperishable platform of intellectual worth and moral integrity, going forth daily panoplied in the tried armor of moral principle, and do battle earnestly for humanity, holding in our right hand the gleaming sword of truth, in our left the bright shield of honor, while upon our breast-plate shall glow the never dying words, "the lamp of virtue is the torch to glory."

Dr. Thompson followed with the report of a case of Syme's amputation at the ankle joint.

Dr. Chas. W. Miles read an interesting paper on "Improvements in Practical Surgery," which was listened to with deep interest. Referred to the Publishing Committee, with instructions to publish, and the thanks of the Society unanimously voted to Dr. Miles.

The convention adjourned at 11:20 P. M. to attend a little

social repast that had been provided by the druggists and physicians of Paducah, for the refreshment of their honored guests.

MORNING SESSION.

The Convention was called to order at 8:30 A. M., Dr. C. W. Miles, the President-elect, in the Chair, when Dr. Brooks exhibited an interesting case of Pott's disease of the spine to the Association.

Dr. Norris, of Metropolis, followed with some remarks on the treatment of rheumatism.

Dr. Dismukes, Dr. Thompson, Dr. Sebastian and Dr. Brooks took part in a spirited discussion of this disease.

The following resolutions were offered by Dr. Singleton:

Resolved, That the thanks of the association are justly due and are hereby tendered to Dr. James Hendley, for the dignified and impartial manner in which he has discharged the duties of the office of President for the last twelve months.

Resolved, That we are greatly indebted to the retiring Secretary, Dr. J. H. Morton, for the able and efficient manner in which he has performed the difficult duties of his department

Resolved, That our thanks are also due and tendered to His Honor, the Mayor, and the City Council of Paducah for the use of the City Hall.

Dr. Morton proceeded to introduce a discussion on the treatment of fractures, in which Dr. J. G. Brooks, Dr. J. W. Thompson, Dr. W. M. Wilson, Dr. David Gardner, Dr. M. H. Carson, Dr. C. M. Sebastian and Dr. Thomas Rivers took part. The subjects considered were of deep interest to the profession, and full of instruction.

The President appointed the following Committees:

Committee of Arrangements—Drs. O. B. Withers, A. H. Champion and E. M. Duncan.

Committee on Medical Ethics—Drs. L. J. Dismukes and F. M. Usher.

Committee on Public Hygiene—Drs. H. F. McNary, J. A. Carr and W. W. Gilbert.

Committee on Vital Statistics—Drs. J. Norris, D. J. Foster and Thomas Rivers.

Committee on Epidemics—Drs. A. B. Whayne, T. C. Parker and W. R. Wale.

Committee on Obstetrics—Drs. J. W. Singleton, B. F. Marshall and George Weaks.

Committee on Improvements in Practical Medicine—Drs. Geo. Beeler, R. J. Howard and W. M. Wilson.

Committee on Improvements in Surgery—Drs. J. G. Brooks, J. W. Thompson and J. L. Dismukes.

Committee on Improvements in Pharmacy—Drs. J. H. Morton, J. B. Payne and J. A. Dodson.

Committee on Finance—Drs. R. T. Hocker, A. T. Hobbs and C. A. Elliott.

Committee of Publication—Drs. J. W. Singleton, M. H. Carson and D. A. Maxwell.

Committee on Surgical Appliances—Drs. J. W. Thompson, David Gardner and John McNeeley.

Dr. M. H. Carson, of Smithland, read an interesting report of a case in his practice, which was listened to with interest and referred.

The leading subject chosen for discussion at the next meeting is *Cholera*, Dr. M. H. Carson to write a paper and open the debate.

Dr. C. M. Sebastian reported on "Asthma," furnishing a case of this troublesome disease which lately occurred in his practice.

The Chair appointed Drs. J. H. Norris, D. A. Maxwell and J. G. Brooks a Committee on New Remedies.

Dr. Norris suggested the appointment of a Committee on Uterine Diseases.

Dr. A. B. Whayne recommended the "Hank Dilator." Dr. Whayne was placed as Chairman of Committee on Gynæcology.

Adjourned to meet in Eddyville, on the second Wednesday in November, 1879.

OPENING OF THE MEMPHIS HOSPITAL MEDICAL COLLEGE.

The event of April 23d, 1879, was the formal opening of the new Memphis Medical College, the Medical Department of the Southwestern University. The building, which has just been completed and furnished, is a handsome three-story brick, situated on Union street, immediately opposite the Marine and City Hospital.

At half-past 4 o'clock a delegation of prominent physicians and citizens of Memphis visited the building for the purpose of inspecting its arrangements and furniture, and also assist at the opening ceremonies. The guests were first shown through the building by Drs. W. E. and W. C. Rogers, and all the arrangements excited the approval and admiration of all present, from their completeness and order.

On the first floor are situated the offices of the Secretary and the Janitor, and there is also a lobby in the rear of the lecture room on that floor. The lecture rooms occupy the back part of the first and second stories. On the third floor are the regular dissecting rooms, and a smaller apartment designed for private dissections. The company were then escorted into a room on the third floor, where refreshments were served.

The opening address was made by Judge J. A. Anderson, of the Board of Trustees, who spoke in praise of the management, by whose exertions the enterprise had been brought to a success-

ful completion, and also expressed on behalf of the Trustees and others in charge, their grateful appreciation of the kindness aud generosity of those by whose aid their work had been so much advanced. Short addresses in the same strain were then made by Drs. Mitchell, Wise, Sim, Overall and Purnell, Majors Thompson and Busby, Mr. F. S. Davis and others. The closing toast was given by Dr. Mitchell on behalf of the Faculty, who thanked the generous public and friends abroad for the assistance they had rendered. Then ensued more festivity, which ended the programme of the evening. The College will be ready to commence its career of usefulness on the first of October. The prospects for success are very flattering; over seventy-five students are assured at the opening of the session. The Board of Trustees are:

Board of Trustees—Maj. L. P. Cooper, President; H. Furstenheim, Esq., Secretary; Capt. C. B. Church, Treasurer; Maj. J. J. Busby, Maj. A. N. McKay, A. C. Treadwell, Esq., Gov. Jas. D. Porter, Hon. H. Casey Young, Gov. Elisha Baxter, Col. L. J. Dupree, Senator L. Q. C. Lamar, Robt. Lowry, Esq., Col. James Elder, Dr. D. T. Porter, Hon. John L. T. Sneed, Hon. T. J. Turley, Hon. B. M. Estes, Hon. J. A. Anderson, Col. C. W. Frazier, W. B. Galbreath. Esq., Louis Hanuer, Esq., Senator Isham G. Harris, Senator A. H. Garland, Hon. John T. Jones, Col. S. S. Ashe, Gen. E. C. Walthall, Hon. C. C. Clay, D. Sutton, M. D., Capt. Charles G. Fisher, Hon. B. J. Lea, W. P. Proudfit, Esq. Wm. N. Brown, Esq.

Faculty—W. E. Rogers, M. D., Professor of Surgery, Clinical and Operative; D. D. Saunders, M. D., Professor of Principles and Practice of Surgery; S. C. Maddux, M. D., Professor of Theory and Practice of Medicine; F. L. Sim, M. D., Professor of Obstetrics; B. G. Henning, M. D., Professor of Anatomy and Orthopœdic Surgery; G. W. Overall, Professor of Physiology and Diseases of Children; Heber Jones, M. D., Professor of Diseases of Throat and Chest and Clinical Medicine; Julius Wise, M. D., Professor of Materia Medica and Therapeutics; R. B. Maury, M. D., Professor of Gynæcology; Julius Fahlen, M. D., Professor of Chemistry, Pharmacy and Toxicology; A. G. Sinclair, M. D. Professor of Ophthalmology and Otology; R. B. Nall, M. D., Professor of Pathological and Venereal Diseases; W. B. Rogers, M. D., Demonstrator of Anatomy; W. E. Rogers, M. D., Dean of the Faculty; office, 338 Main street, corner of Union, Memphis, Tenn.

ST. LOUIS COLLEGE OF PHARMACY.

At the commencement exercises, held Tuesday evening, March 19th, 1879, at Apollo Hall, the degree of Ph. G. was conferred upon the following gentlemen: J. F. Baehr, J. H. Evans, O. Fehringer, H. F. Hapebrock, E. Knoebel, G. J. Klein, Wm. F. Krembs, F. J. Meyer, H. T. Moeller, E. H. Mueller, John Ramming, J. A. W. Sommers, C. C. Tate, E. M. Till, J. P. Schoenthaler, E. H. Wolff.

The valedictory address on behalf of the Faculty was delivered by Prof. J. M. Good, Ph. G.; on behalf of the graduating class, by Mr. E. M. Till, Ph. G.

The exercises were followed by a social reunion.

The annual meeting of the college took place on Monday, April 28th, at the lecture room. The different committees presented reports, showing the institution in a flourishing condition. The election of officers for the ensuing year resulted as follows: President, Geo. Ude; Vice-President, Chas. Geitner; Recording Secretary, E. P. Walsh; Corresponding Secretary, G. H. Chas. Klie; Treasurer, F. W. Sennewald; Trustees, Chas. Habicht, Chas. Bang, W. H. Crawford, Henry Braun, Gustav Koch.

Professors are as follows: Chemistry, C. O. Curtman, M. D.; Pharmacy, J. M. Good, Ph. G.; Materia Medica, O. W. Wall, M. D.

MEDICAL ASSOCIATION OF THE STATE OF MISSOURI.

The Medical Association of the State of Missouri held its eighteenth annual Convention at Columbia, Boone County, Mo., commencing on the morning of Tuesday, May 20th, 1879, and lasting two days. A large-hearted and generous hospitality was extended to the profession by the citizens of Columbia, and the visit was productive of much pleasure to all concerned. There was a large attendance of delegates, and the proceedings passed off in the most satisfactory manner. The meeting was held in the chapel of the State University.

At 11 A. M. the Convention was called to order by the President, Dr. Schauffler, of Kansas City.

Prayer was offered by the Rev. Dr. Dodge.

The Committee on Credentials proceeded to examine the credentials of members.

Dr. G. M. B. Maughs, of St. Louis, on behalf of the Committee on Arrangements, reported that the committee had procured the use of the hall in which they were then assembled, also adjoining rooms for committees, and accommodations for one hundred and fifty guests.

The President introduced Dr. S. S. Laws, President of the Missouri State University.

Dr. Laws spoke as follows: I am desirous of making an announcement, but had not expected to make it so early. I wish merely to state that all the rooms you may have use for for the use of committees will be at your service, on this floor or elsewhere in the building, and also that all the departments of the institution are wide open to you, and that the members of the faculty in each department will be happy to see you. So we hope you will not think you are intruding by going into any part of the building and inspecting it to your full satisfaction. I would particularly mention the laboratory, in charge of Prof. Schwietzer, who will render any service to make everything accessible. There is the department of natural history on the next floor, and as to the agricultural farm, if any members wish to visit it, carriages will be at your disposal. It is our desire to render your stay, to the full extent of your time, pleasant and profitable. In other words, I wish you to have as full opportunity of becoming acquainted as possible. [Applause.]

The Committee on Credentials made a partial report.

The President announced that the next order would be the election of officers for the ensuing year.

Dr. Lutz moved the appointment of a Nominating Committee.

Dr. A. P. Lankford moved, as a substitute, that the election be by ballot.

Dr. Todd moved, as an amendment, that the President of the Society be elected by ballot, and that all other officers be nominated by a committee.

Dr. Evans inquired what was the law on the subject.

The President said it only provided that the election of officers shall take place annually, and that it shall be by ballot.

Dr. Todd repeated his amendment.

Dr. Lankford said he made his motion so that the members could express their preferences.

Dr. Porter expressed himself in favor of an open ballot.

The President called for a vote on Dr. Todd's amendent. It was declared carried.

The motion of Dr. Lankford, as amended, was then put to a vote, and carried.

The Chair stated that nominations for President were in order.

Dr. Alleyne said he begged leave to offer as nominee for President of the State Association a gentleman whom he thought was well known to the Association and throughout the State, one who had taken a great interest in the Association, who had done much good as far as the Association was concerned, as well as throughout the State. He proposed to nominate Dr. G. M. B. Maughs. [Applause.]

Dr. Thompson, of Jefferson City, seconded the nomination. He thought Dr. Maughs was thoroughly identified with the profession, and had done as much, if not more, than any other gentleman, to build it up in the State of Missouri.

Dr. Taylor said he rose to put in nomination a man who did not require to be introduced to that Society. He put in nomination Dr. J. M. Allen, of Liberty. [Applause.]

Dr. Essig seconded the nomination.

On motion of Dr. Borck the nominations were closed.

While the tellers were counting the vote, the Chair appointed on the Nominating Committee Drs. Lutz, Sloan, Hardaway, Duncan and Evans.

The tellers reported that the total vote cast for President was 79; the number necessary to an election was 40. Dr. Maughs had received 50 votes, and Dr. Allen 28.

On motion, the choice was declared unanimous.

Dr. Maughs, of St. Louis, the newly-elected President, was escorted to the chair. He returned thanks for the high honor conferred on him. He appreciated it the higher because it was only a few minutes previously he knew that any gentlemen were willing to risk the destiny of that grand Association in his hands. He thanked them cordially. He said he had always deemed it an honor worth a lifetime of labor to preside over a medical convention. A man who did not feel honored by such a compliment would be unworthy of his profession. He requested the aid of others in the discharge of his new duties. He said he would endeavor to deal honestly, openly, candidly and fairly, as he had done through life. His remarks were concluded amid applause.

Dr. Allen complimented the meeting on its sound judgment. Their selection had been a wise one. They could not have voted for a gentleman who would be more agreeable to him, and they could not have selected one in the State of Missouri to fill that office with more dignity, or with the good of the profession more at heart, than when they elected Dr. Maughs. During the twenty-five years he (the speaker) had been in the profession he had never flinched from his duty, or any duty that his professional brethren had sought to place on him. It was only in the discharge of his duty that he consented to be a candidate against so distinguished a gentleman.

On motion of Dr. Lankford, seconded by Dr. Rumbold, a vote of thanks was passed to the retiring President for the able and impartial manner in which he had discharged the duties of his office.

Dr. Watson, Mayor of Columbia, then delivered an address of welcome to the members of the Convention. In the course of his remarks he said: Gentlemen of the Missouri Medical Association. Formerly young maidens went forth with dance and with timbrels to welcome the conquering victor from the field of battle, but times have changed since Jeptha's daughter went forth from the walls of the ancient city to greet the hero with music and song. Though you, gentlemen, come with the victor's wreath twined around your brows, from battling against man's most in-

sidious and relenting foe, a less charming, though not less hearty welcome is accorded you. On behalf of the citizens of our town, I have the pleasure of welcoming you. Gentlemen, you are welcome. Is there need for me to say more? Can smooth words or fine phrases express more? I simply diagnose the whole case by repeating, you are welcome. It is my privilege to extend to you the hospitality of our city and the freedom of our town, noted for its beauty, the wealth, the culture, the refinement and hospitality of its people. Columbia to-day throws wide her portals and bids you welcome. As our guests, every facility which we can command shall be utilized without stint. The seat of the State University, and admitted to be the Athens of the West, Columbia would fall below those qualities of mind and heart which are attributed to her if by any dereliction she showed a lack of appreciation for a profession so distinguished and illustrious. In my official capacity as Mayor of Columbia I greet you welcome to all the immunities, privileges and hospitalities of every household, hoping that hereafter you will indulge the pleasing recollection that your stay has been one of pleasure as well as profit. [Applause.]

Dr. Porter read a report on the order of business, and gave the titles of papers already received by the committee.

The report of the Committee on Progress in Medicine was called for, but Dr. Alleyne said he was not ready.

At a quarter after 12 o'clock the Convention took a recess until 2 o'clock.

AFTERNOON SESSION.

The Convention was called to order by President Maughs.

A telegram was received from Dr. John W. Trader, of Sedalia, expressing his regret at not being able to attend the Convention. As Chairman of the Committee on Ethics, he urged the adoption of the amendments reported by the Medical Association of 1878.

Dr. Schauffler, the late President, was requested to read an address to the Convention in the evening of this day.

Dr. Lutz, on behalf of the Nominating Committee, reported as follows:

First Vice-President—Dr. A. W. McAllister, of Columbia.
Second Vice-President—Dr. C. Lester Hall, of Marshall.
Third Vice-President—Dr. W. H. Bryant, of Savannah.
Fourth Vice-President—Dr. C. A. Thompson, of Jefferson City.
Fifth Vice-President—Dr. A. N. Girard, of Shelbina.
First Recording Secretary—Dr. A. J. Steele, of St. Louis.
Second Recording Secretary—Dr. W. E. Fischel, of St. Louis.
Corresponding Secretary—Dr. E. C. Evans, of Sedalia.
Treasurer—Dr. A. B. Sloan, of Kansas City.

On motion, the rules were suspended, and the President was authorized to cast the vote of the Convention in favor of the nominees. The ticket was, therefore, unanimously elected.

Dr. Prewitt read a paper on the Progress of Surgery. This paper, although it was quite interesting, the Secretary informed the Society that it would be returned to the author.

Dr. Borck read a paper on the same subject. This paper included a history of surgery, reaching back for several hundred years. This was quite interesting; at times the Doctor was quite eloquent. After he had concluded its reading, he exhibited a rubber bandage, thinner than that usually employed, which he recommended instead of the ordinary dressing. He then handed to the members slips of paper on which he had the metric system printed.

Dr. Todd, of St. Louis, read a paper on Laryngeal Growths, and exhibited two specimens. The paper was well received, and discussed by several of the members.

Dr. C. H. Hughes read an interesting paper, and exhibited an instrument of his invention, the "Asthesiometer." His paper was on Patellar Tendon Reflex.

In the evening Dr. Schauffler, of Kansas City, delivered his address. This was well received, and a vote of thanks was passed on its completion.

The next place of meeting was then discussed, and ended in the election of Carthage.

SECOND DAY.

The report of the Treasurer, Dr. A. B. Sloan, was made, and given to a committee, this committee reporting in due time that the accounts were correct.

Dr. F. J. Lutz, of St. Louis, read a very interesting paper, and exhibited photographs and specimens. The whole paper was a credit to the author.

Dr. C. E. Michel read one of the most interesting and important papers of the meeting. The main point of the paper was against strong applications or irritating applications to the eye. This paper was discussed by quite a number of the members.

Dr. Steele read a paper on a rare case of Pseudo-Hypertrophy of the Muscles, and exhibited two diagrams.

Dr. W. Dickinson read a paper on Mydriatics and Myotics and indications for their use.

Dr. S. S. Todd, of Kansas City, delivered an address on Egyptian Medicine. This was very interesting, and received a vote of thanks.

The President appointed the following standing committees:

Committee on Arrangements—Dr. Matthews, Dr. Bryant and Dr. Gregory, of St. Joseph.

On Credentials—Drs. Miller, Wright and Moss.

On Scientific Communications—Drs. Hughes, Henderson and Taylor.

On the Progress of Medicine—Drs. Alleyne, S. S. Todd, and Allen, of Liberty.

On the Progress of Surgery—Drs. Lankford, Dysart and Mudd.

On Medical Education—Drs. S. S. Laws, of Columbia, Wm. Bond, of St. Louis.

On Ethics—Drs. Essig, Thos. Kennard, and Lenoir, of Columbia.

On Publication—Drs. Wm. Porter, Dickinson, Barret and the two Secretaries of the Association.

On motion adjourned to meet at Carthage, on the third Tuesday in May, 1880.

THE BANQUET.

On Wednesday evening, prior to their departure for home, the members of the Convention were entertained at a banquet, held at the Planters' Hotel. The tables were suitably decorated, and the bill of fare was excellent. The pleasing strains of a band of music added to the attractions of the occasion. The large dining room was well filled with guests, and general hilarity prevailed. Grace was said by Dr. Laws of the State University. After full justice had been done to the viands, Mayor Watson, the presiding officer, called on Hon. W. T. Switzler, editor of the Columbia *Statesman*, to respond to the first toast, "The State of Missouri."

Col. Switzler said: The lateness of the hour, Sir, at which I am called, and the circumstances surrounding me, utterly forbid extended remarks in response to the toast you have read. It is a very suggestive historical heading, and in every other point of view. Indeed, Sir, not only a short address might be made in response to it, but articles for magazines and books might be written in reference to the past history and present prospects and future glory of our great Commonwealth. [Applause.] Suffice it, Mr. President, to say that Missouri, in all its relations to the other States of the Union, is but the product of that Western activity and enterprise which are among the potential forces that grasp at the knowledge and population and the wealth of the world. Missouri is but a result of this activity and enterprise. I recall the fact, Sir, that the first settlement in our great State was at St. Genevieve, more than two hundred years after the discovery by DeSoto, and more than sixty after the exploration by Marquette. I recall the other historical fact that at the time of the admission of Missouri to the Union in 1821, the population of our State at that time was only 70,000. At the time of the admission of Missouri to the Union, the City of St. Louis contained only a population of 12,000; there were at the time on the tax bills of that city about 430; no one paid on more than a taxable value of $20,000; a large majority were not $5,000. In 1821 the entire taxes collected were $3,800. According to the last census there are 400 tax-payers in the city of St. Louis who pay on tax bills of above $50,000; several of them more than a million, and in the aggregate sixty millions.

Mr. President, we note the tremendous strides this great Commonwealth has made in the achievement of wealth, in the arts, in the sciences, in commerce, and in all the great industries which mark and distinguish the civilization of our eventful era. To-night, about sixty years after her admission to the Union, Missouri, instead of having a population of only 70,000, boasts a population of over two millions, and its proud commercial metropolis, St. Louis, [applause] which to every Missourian ought to be as the apple of his eye, instead of having a population of about 12,000, boasts a population of more than 500,000, and Missouri a taxable value exceeding six hundred millions of dollars. See what we have accomplished in little more than half a century. At the time of the admission of our State into the Union, why even St. Louis was without commerce, without schools, without railroads, without street cars or gas, crossing the river in the old wooden flats, instead of using the magnificent steel tubular bridge which now spans the Father of Waters. At that time, Sir, there were no railroads in the State. Indeed, as a means of communication between the different portions of the country for passengers and freight, railroads had not been invented. Even as late as the year 1812 steamboats were scarcely known, and the electric telegraph, which now encircles the globe, was not even dreamed of for a generation afterwards.

Now, Sir, what do we perceive? Missouri, with its population of more than two millions, with a taxable wealth of six hundred millions; a State which, instead of being as it was then, unknown to the large majority of the people, even upon our seaboard, unknown even in name; a State west of the Mississippi without population, without prosperity, without commerce, without government almost, now, Sir, is one of the central States of the Union, and the very seat of empire; [applause] a State which is the fifth State in point of population in the sisterhood of thirty-eight States; a State entitled to fifteen deputies in the Electoral College; a State, Mr. President, in conclusion, which, with a wise administration of its government, and enjoying the beneficent smiles of a gracious Providence, will attain to untold wealth and to population,—will be consecrated as the home of religion and liberty and science and art, and be the very keystone of the arch of an indestructible Union. [Loud Applause.]

The next toast, "Our Guests," was responded to by Dr. J. M. Allen, of Liberty, Mo., who spoke as follows:

MR. PRESIDENT AND GENTLEMEN:—In the common parlance of the profession—and you must not expect a doctor of twenty-five years' practice to step much out of the track—in the diagnosis of a case we first ask what is the disease? Second, we trace the indications of nature, and ascertain, if possible, what is its cause. We have received and enjoyed this cordial and magnificent hospitality, so far in excess of anything that we have received before, it naturally leads us to inquire, what is the cause? Man,

without the refining influences of education and religion, possesses none of the cardinal virtues. But when you give him the elevating and refining influence of religion and education you develop in him all the cardinal virtues. When you have elevated him to this point he then has that magnificent principle of love of his race. A love of race is the prompting, in my opinion, of this magnificent hospitality. Columbia has been peculiarly fortunate in several regards. First, in her first settlers. They were men of broad and comprehensive minds; men who had minds, and men who had foresight enough to see the great advantages that would grow from an institution like the University of Missouri, located at Columbia, and while it has been of remarkable advantage to the people here, the State at large has been benefitted therefrom. Their efforts, their persistent and constant efforts, did not dwindle down to the mere matter of local interests, but expand and comprehend the great interests of the State of Missouri. These influences that have been the outgrowth of this institution have done much to put the citizens of Columbia in an enviable position. I have often heard the statement that Columbia was the Athens of Missouri, and I claimed that honor for Liberty. I now yield to Columbia. [Applause.] Gentlemen, when I say this, I do not say it as a matter of form; I say it from the bottom of my heart, and when I say that I yield the palm to any town, or any county, or any people, in preference to my own native county, I say a great deal. [Applause.] Gentlemen, this is my first visit to Columbia. It is the first time I have had the pleasure of going through and examining for myself this grand institution, the University of the State of Missouri. It should be the pride of the State; it is an honor to the State, and the State should feel proud of having such an institution, and Columbia remarkably fortunate in its being located here; and let me say, as a friend to the highest order of medical education, that I have given a good deal of attention to the manner in which medicine is taught in this institution, and I say to-night my prejudices have all been removed. I believe that the State of Missouri, in her move in this direction, will place on a firm footing that principle we have all been contending for so long—that of elevating our profession to a point that will command the respect of the citizens of Missouri, and forever banish quackery. [Applause.]

Now, gentlemen, I wish I was a poet, but they are never in my shape; [laughter and applause] therefore, I cannot get off any poetry. I wish I was an orator. But when preceded by such a gentleman as Col. Switzler, to aspire to be an orator would be placing me in a false position. But I do say I leave Columbia with the most pleasant feelings, and I believe I may say, on behalf of every gentleman attending the Medical Association, that we leave with the most pleasing remembrances, and with an earnest desire that what she has accomplished in elevating our

race by intelligence and religion shall in the next twenty-five years treble what she has already done. [Applause.]

Dr. Maughs, of St. Louis, responded to the toast, "The Citizens of Columbia," as follows:

MR. PRESIDENT AND GENTLEMEN:

From a time when the memory of man runneth not to the contrary, the hospitality of Columbia, the glory and the gem of the State, has been the theme of song and story. But like the Queen of Sheba returning from the Court of Solomon, we can truly say, "the half has never been told." This people early discovered the true philosophy of life, that to exalt, refine and ennoble the race, you must feed it well. The most refined and noble men and women are those who are best fed; the the higher virtues and good cooking are inseparably associated. Fill a man's stomach with well cooked and delicately prepared food, and he is grateful to God, and in love with his fellowmen, ready to run his hand to the bottom of his purse to feed his next door neighbor, or to send a missionary to the Hindoos, or to buy his wife a new dress. With an empty stomach, or with one filled with raw or badly-cooked potatoes, or oatmeal porridge, he yelps with the Commune, and is ready to throw stones at a passing carriage or help hang the missionary.

You may have a starved poet or a hungry scholar, but true nobility of soul is necessarily associated with a full stomach. If, therefore, Boone County, and more especially Columbia, is famed for the nobility of its people, it is because the bewitching art of cookery has here been brought to its greatest perfection; good cheer has begotten hospitality, and this again has reacted upon its cause, until there has been produced here the bravest and noblest of men, and the fairest and loveliest of women—very angels—and while such inhabit earth, we rejoice that we are not in heaven, but of earth earthly; that we may love and worship them, and yet they are still slightly tainted with the foibles of their sex, and have played off, as I see clearly, on us innocent doctors a rather sorry trick.

Having been long drugged with nauseous draughts by their family physicians who mercilessly had them gape and swallow as ordinary mortals are told to do, they determined to take revenge on the whole tribe, and for this purpose have taken advantage of this occasion, when the doctors of the State are gathered together in council, to deliberately feed them to death. The result has been truly deplorable. Around me here are a number of doctors who came up to this Association as lean as weasles, and now after two day's feasting, in which they have been compelled to eat their way through eight or ten courses three times a day, they are bloated up like bladders, and will go home to die with dropsy; and others as my friends Drs. Hughes, Schauffler and others, when they came here could have crawled through a lady's finger ring, but now present such Falstaffian proportions

that a dozen cases of ale, more or less, would scarcely add to their dimensions. Why, their wives will not know them and will sue out divorces—see the mischief done—while the rest of us will return changed from the most amiable of men as we were when we left home, to gloomy, morose dyspeptics. This has been a wholesale "slaughter of the innocents."

Well, I am glad to know our wrongs will be avenged, as I learn that next week this place is to be visited by a hungry swarm of editors, who, more ravenous that a cloud of locusts, will utterly devour this people. Now, a doctor is a kind and gentle animal, who can be killed by over-feeding, but who ever heard of a hungry editor being thus disposed of; why, their stomachs are as elastic as their consciences and they will put away enough provisions next week to last them until after the Christmas holidays. They will produce a sore famine in this land, and a wail of lamentation will be heard and there will be no doctors to administer unto them. Then, indeed, will they be sorry they did us so [Applause.]

Owing to the lateness of the hour no more toasts were read or responded to.

The courtesies extended were from the first to the last manifold, cordial and unwearied. On our arrival, we were met by a deputation of citizens, escorted to a spacious hall, from whence, by the Committee of Arrangements, we were made to experience the first demonstration in the extended series of hospitalities in reserve, and which was totally unexpected, viz: Assignment to the homes and society of the warm hearted citizens. By our several hosts, carriages were furnished for conveyance to and from the assembly, and for excursions to places of interest in and around the city. The kindly ministries and urbanities of the ladies of the several households, deeply appreciated, but which by enumeration would be shorn of their delicate fragrance, were extended to us strangers with all the sincerity and warmth which characterize life-long friendships. The banquet, the last and crowning act, bountiful and royal in all its details, will serve to crystalize into an enduring monument the pleasant reminiscences of the session of 1879.

True and considerate to the last, our hosts accompanied us to the depot, and on the departure of the train, bade us "God speed."

Clinical Reports from Private Practice.

Abdominal Section for Ruptured Uterus. By Chas. Black, M. D., of Saint Louis.

On April 15th, Mrs. Biermann of 2118 O'Fallon Street, a sensible midwife, was called to Mrs. Shea at 5:30 A. M. The membranes were already ruptured and the waters discharged; she recognized a head presentation, the os being of the size of a silver dollar; pains severe in the back and front, but no bearing down. Began to bear down about 10 A. M., and the head advanced, but the os dilated slowly; was on the chamber, and evacuated the bowels at 11 A. M. Just before 12 M., the head was encroaching on the perineum and separating the labia, but the os could still be felt, and not quite sufficiently dilated to allow the head to pass. Suddenly in the midst of a severe pain, the patient cried out, and the head receded from the touch; lips became blue and body cold. She complained of much pain in the abdomen, but no labor pains occurred afterwards. During the labor, the patient had taken of the essence of cinnamon. After the disappearance of the head, the midwife found a hand high up, but could not reach the head again.

At 2 o'clock, P. M., Dr. Hodgen was called, and I accompanied him to the patient's residence. Her condition was found to be as follows: Pulse small and frequent, no special expression of face, and no great prostration. She complained of constant and severe pain in the belly.

On palpation, the fact that the fœtal limbs were immediately in contact with the anterior abdominal wall was clearly evident. Dr. Hodgen made an examination per vagina, and found an unusual fullness at the posterior wall of the upper part of the vagina, while in front the hand passed through a rent, and above the brim of the pelvis came in contact with the fœtal head and hand of the fœtus, and the intestines of the mother.

He instructed me to administer the chloroform, and the patient being fully anæsthetized, an incision was made, beginning near the umbilicus and extending down the linea alba to within about three inches of the pubis. On opening the peritoneum, large clots of blood were apparent, and an arm and leg. The arm presented was pulled out and the head lifted and drawn through the opening; the placenta being free in the abdomen, it was removed

with the fœtus, which was a large one. Dr. Hodgen likewise removed about a pint of blood, both clotted and fluid, while I held back the omentum, which, coming down in front of the uterus, was inclined with the intestines, to escape from the abdomen through the wound.

The rupture in the peritoneum was large and irregular; the bladder was robbed of peritoneum on its superior and posterior part; considerable blood infiltrated the connective tissue beneath the peritoneum, so that it presented the appearance of being much thickened; so much so, that Dr. Hodgen mistook it for the vaginal wall and commenced stitching it up. The ureter ran near the torn border of the peritoneum at the right side. This was carefully avoided in making the stitches. Not many of these were taken before Dr. Hodgen was convinced he was only stitching the peritoneum and infiltrated sub-peritoneal tissue, and discovering that the stock of silk was insufficient, he decided to go to the office for more, intending also to procure some silver wire and chloroform, I having used almost all of the latter, which we fortunately had along with us. Leaving me to keep up the anæsthesia and prevent a prolapse of the contents of the abdomen through the wound, he went and returned shortly with Dr. Mudd. Some of the stitches already made were removed, and by passing his hand into the vagina, Dr. Hodgen found with some difficulty the lower part of the rent in the vaginal wall on the right side, and extending obliquely across towards and including a part of the neck of the womb, terminating on the left side in a ragged tear. Beginning in the vaginal tissue at the lower part of the rent, the needle was inserted from the mucous surface, carried out through the peritoneal surface, and carried through opposite border from peritoneal to the mucous surface. In this way the knot was tied and cut, so that it presented in the vagina; the stitching was continued in this manner until perhaps 10 or 12 were taken, completely closing the rent. During this, there was almost no hemorrhage; the uterus was firmly contracted, in position, lying to the left of the spine, and its fundus above the umbilicus.

After the stitching was completed and while Drs. Mudd and Hodgen were sponging away the small amount of blood, I observed a whitish creamy fluid with a slightly yellowish tinge, and lighter in color than ordinary pus, discharging from under the omentum on the right side near the upper end of the cut, and to which I called attention. Perhaps from four to six ounces were discharged perfectly free from blood, except the streaks which stained it as it passed over the external wound. It was odorless and proved to be tasteless (Dr. Mudd) and flowed more freely when pressure was made above and on the right side of abdomen. In this connection it may be remarked that the effect of the anæsthetic was somewhat moderated, and that the patient momentarily struggled. Dr. Hodgen passed his hand into the

cut and sought for the source of the fluid, but with a negative result.

The parts were freed from blood and discharge; the external wound closed by interrupted sutures, including the peritoneum with the other elements of the abdominal wall; a compress of linen was applied, and on this a small pillow and a snugly fitting bandage; while yet the patient was under the influence of the chloroform, a-quarter of a grain of morphine was given her.

The patient showed no great exhaustion from the operation; pulse was small and frequent; breathing regular and full; morphia (quarter grain) was ordered in one hour if the patient should awake with much pain, three quarter-grain powders being left.

During the stitching of the rent the bladder was completely emptied from the pressure of the hand in the vagina; the uterine wall bled very slightly, and this entirely closed when the rent was closed.

6 P. M.—Dr. Mudd visted the patient; she was restless; suffered from pain and thirst; pulse frequent and weak.

11 P. M.—Dr. Hodgen found her with hot skin; pulse stronger and complaining of pain in the back; had taken the remainder of the morphine. A grain of morphine was ordered, divided into six powders, one to be taken every two hours in conjunction with seven and a-half grains of chloral if pain continued.

APRIL 16TH. 7 A. M.—Dr. Mudd visited; found the woman tossing and restless; pulse less frequent and stronger; forehead moist and cool; had taken the second grain of morphine but had obtained no sleep; had also taken thirty grains of chloral.

9:30 A. M.—Dr. Mudd visited; patient's pulse was weaker; three-sixteenths of a grain of morphine was administered hypodermically; she continued to suffer, grew weaker and died at 12 M., April 16th, twenty-two hours after the operation.

The above case reported by Dr. Black furnishes an intimation that one may be deceived as to the tissue rent. In this case the sub-peritoneal connective tissue was so infiltrated with blood that I mistook it for the vaginal wall. I call attention to this that others may profit by it. The white fluid discharged from beneath the omentum was undoubtedly chyle. A portion of it was collected and was found coagulated, and presented the appearance of cold tallow.

The specimen was presented to Dr. Baumgarten, who examined it. He reports:

MAY 26TH, 1879.

DR. HODGEN:

DEAR SIR:—Repeated examinations of the specimen of fatty fluid from the abdomen have not developed anything beyond my verbal report. The specimen, as seen by me, looks like an impure animal fat liquefied by heat, and then solidified again by cooling. It is very easily soluble in ether, leaving only

a small portion of residue. This latter, under the microscope, shows, besides some amorphous granular matter, distinct cell formations; some of these are leucocytes, some evidently of an epithelial nature. There is nothing in this result of microscopical examination to militate against the assumption that the fluid as originally obtained was lymph; altered probably by having been collected in varicose dilations, or in extravasations from mesenteric lacteal vessels.

Very truly, G. BAUMGARTEN.

This chyle must have been from a cyst, as no such rapid flow could have occurred from other than a large accumulation.

JNO. T. HODGEN.

A Remarkable Case of Fatal Hemorrhage from the Genital Organs. Reported by Thos. Kennard, M. D., of St. Louis.

On Monday, June 2nd, at twenty-five minutes to 12 o'clock, a young man came to my office, No. 511 North Sixth street, and requested me to visit a young woman at the Eutaw House, on the northwest corner of Seventh and St. Charles streets, one block distant. Upon inquiry as to what was the matter with her, he replied, that she was bleeding, and that they (he and the girl) could not stop it. In about three minutes I reached the hotel and was directed to room No. 16, on third floor, on the St. Charles street front. I was admitted to the room by the young man who came for me, and was greatly surprised at the sight before me. Upon the bed lay a young woman perfectly blanched from the loss of blood; her surface as cold as marble and almost as white, except around her nose and below her eyes, where a purplish discoloration was very marked. There was no pulse at the temple, the wrist or the ankle. The impulse of the heart-beat was very feeble; the respiration was slow, irregular, labored and jerking; she had great thirst, and was constantly calling for water; was much alarmed; very restless, and continually turning from side to side, and attempting to raise her head. Her underclothing, as well as the sheets, blankets and bed spread were thoroughly saturated with blood, so that you could wring it out of them. There was not a dry or unstained covering about her. The mattress was soaked with her life-fluid, and besmeared all over with blood. Clots of blood were sticking to the wall-paper and the carpet in many places, as if she had been groping around the room vainly endeavoring to check the hemorrhage. I at once introduced my fingers into the vagina and removed a large amount of coagulated blood, that canal being filled with it thoroughly, and then resorted to the tampon, plugging the vagina completely and closely with raw cotton, and applied a bandage to keep the tampon in place. As soon as

some brandy could be procured, which required only a few minutes, I gave her a moderate dose with thirty drops of laudanum. Finding by my first examination—per vaginam—and afterwards by external manipulation that there was no enlargement of the womb, no signs of accumulation of blood in that organ, and as far as I could detect no signs of injury done to it, I thought that, perhaps, she might rally from her condition. No hemorrhage whatever occurred after this, but her symptoms grew rapidly worse, and she died at eight minutes past 12 or thirty minutes after I first saw her—from syncope or failure in the capability of the heart to act from the great loss of blood. She bled to death from eight hours continued hemorrhage, which fatal result might have been prevented had medical assistance been sought in time. As soon as I had checked the bleeding I gained the following information from her in regard to her identity and life. She told me her name was Mary Cahill, and that her parents, John and Mary Cahill, lived in the rear of 1315 North Ninth street, near the corner of O'Fallon and Ninth, and were poor, hard-working and respectable people. That she had lived at home, with the exception of three months, when she was out at service.

That she was seventeen years and eight months old, and always had enjoyed good health, and that since she became a woman she had menstruated regularly, and had never had any symptoms of pregnancy as far as she knew. She told me that she had become acquainted with the young man who had come for me, not very long since, but had been intimate with him on several occasions, and also with another man. She said that they had come to the Eutaw House at 10 P. M. on Sunday night, and she had occupied the same room and bed with him; that about 4 o'clock Monday morning she had commenced flooding, and that all efforts to stop it had failed. She did not reproach her friend for having maltreated her in any manner, and positively denied that any instrument had been used upon her by herself or any one else. Seeing that her death was inevitable, and that she was sinking rapidly, I informed her companion of her danger, and advised him to go for her mother, whom he said he had gone for before he came for me.

This morning I saw the body of the deceased at the City Morgue, and ascertained that no hemorrhage had occurred after I had applied the tampon. At 4:30 this evening, I was present at the autopsy made upon the body by Coroner Auler and his assistant, Dr. Seaman. The body was unusually white and blanched, as if completely drained of blood. The abdominal viscera were in a perfectly normal condition; as healthy as I ever saw in any subject, but very thoroughly depleted. The genito-urinary organs were removed, and upon a thorough examination, the womb presented no appearance of ever having been impregnated, and was perfectly normal in every portion,

except at the fundus, where there was some discoloration of the mucous membrane. The ovaries, Fallopian tubes and ligaments of the uterus, as also the bladder and rectum, were perfectly healthy. The vagina was the only portion of the genital organs that showed any signs of injury. A short distance within that canal, upon the right side, laceration of the mucous membrane was found, and near it, two smaller lacerations. Posteriorly also, and near the ostium vaginæ, was another considerable laceration of the mucous membrane. There was marked ecchymosis of the subjacent and surrounding tissues. It is my opinion that some rough instrument had been passed up into the vagina by the parties concerned, or by some ignorant person with the view of bringing on the menstrual flow, because the girl had imagined that she was pregnant. My opinion is strengthened in regard to this explanation for the following reasons:

1st. That no innocent girl would have bled as long and as profusely as she did from her genitals, without becoming alarmed and sending for a physician in time to save her life.

2d. That such laceration of the mucous membrane of the vagina, and effusion into the surrounding tissues could not have been produced by natural means.

3d. If the hemorrhage was accidental, and both parties were innocent of having resorted to any violence, instrumental or otherwise, how could these lacerations in the vagina have been produced, and if as the appearance of the womb indicated, no injury had been inflicted upon that organ, whence came all this bleeding, and what first excited it in a strong healthy girl who had never had any hemorrhage before, or any irregularity whatever in her catamenial function? It is plain enough that she died from hemorrhage from her genitalia; from a strange and fatal neglect in not calling in surgical assistance in time to check it, and thus allowing her gradually to bleed to death; but what first produced the bleeding can never be determined. The case was a very mysterious one, and perfectly unique. I had no assistance, and no time to do more than was done for her, because there was very little blood in her when I first saw her.

Correspondence.

ST. LOUIS, Mo., May 30, 1879.

EDITOR JOURNAL:—I owe you my thanks for calling my attention to a personal editorial in the *Hospital Gazette* of April 11, 1878, and for sending to me the article a month or two ago; this was the first time that I have heard of or seen it. I am free to say that had I seen it even as early as it was published, without knowing its high authority, I do not believe I should have noticed it, for I do not think it merits a notice; but as it has been partly republished in your excellent JOURNAL of last month by the request of Dr. Frank H. Hamilton, of New York City, and as in his letter, prefacing it, he accuses me of practicing a species of charlatanry, I am obliged to ask space for a reply to both.

If it were not that the *whole* editorial *seems* to be the work of Dr. Hamilton in a personal attack on myself and others in what he seems to think as in defense of himself, I would think that it was a little over-hasty for the editor of the *N. Y. Hospital Gazette*, to take up the gauntlet in defence of Dr. Hamilton. Notwithstanding that I am well convinced as to who is the author of the editorial, I will answer the *Gazette* part, as though its young editor alone were responsible.

The learned gentleman accuses me of misquotations, misrepresentations, flippancy, slur, soiling, etc. Any one who will carefully read my articles in your JOURNAL, and will compare them with what the *Gazette* says I said, will be at once convinced that it is guilty of what it falsely accuses me. He makes designed distortions. I stated in the March number (1878) of your JOURNAL, under the head of correspondence, that I quoted Dr. Hamilton in good faith, and I repeat the same here. The editor *assumes* the authority to say, that Dr. Hamilton never did say this or that, either publicly or privately. Will he please read this short extract found under the caption of "News Items, Medical Facts, etc.," in the American Reprint of the *London Lancet* for December, 1874:

"ONE HUNDRED DOLLARS REWARD.—Dr. Frank H. Hamilton offers one hundred dollars, says the *Cincinnati Clinic*, to any surgeon who will produce a case of fracture of the thigh in which no shortening has taken place. The diagnosis must have been confirmed by at least one medical man besides the surgeon who had charge of the case soon after the accident. The final meas-

urement to be made by Dr. Hamilton himself in company with two other surgeons. The patient must be above twenty, and should not have experienced paralysis or atrophy of the limb."

It may be that the *Lancet* has misquoted Dr. Hamilton or that he may have been wrongly reported (?).

The other gentlemen whom the editor brings in connection with me are able to defend themselves. My own reputation is such that it outweighs all the insinuations of the *Hospital Gazette*. If the other surgeons claim never to have had any shortening after the treatment of fracture of the femur, they can do more than I have been able to do, as a general rule. It is *not true* that I claimed any such results in my writings, Dr. Hamilton and the *Gazette* to the contrary notwithstanding. By good results I understand exactly what the Section on Surgery in the American Medical Association in 1877 adopted, and of which Dr. Hamilton himself was chairman. Shortening or lengthening is not the point of issue in my papers. I did not say that Dr. Hamilton was unfortunate in the treatment of fracture of the femur, nor did I allude to his present mode of treatment in adults with the "model splint." I used the word "unfortunate" in connection with the inclined plane, etc. The editor ventures to speak for the dead also. As the illustrious man to whom he refers (N. R. Smith) has passed away and can not raise his voice, it may be well to remind the *Hospital Gazette* that he was a model gentleman and one for American surgeons to be proud of.

I was not aware until informed by the *Hospital Gazette* that Dr. Hamilton was made a bulwark of by the profession. My impression has always been, and is now, that he is quoted so frequently because he is esteemed as a surgeon, and looked upon as an authority.

The word "disgust" as used by Dr. Hamilton is found in the *New York Medical Record* of January 5, 1878, No. 369, first page, second column, second line, second word. I am very sorry to say that in one or two of my quotations a word or two were left out, but it neither changes nor "soils" in any way the meaning. Aside from these, my quotations and punctuations are *correct*. Enough for the *Gazette;* yet there is do doubt that the young gentleman was in great delight with himself after he first saw the editorial, for if harsh words are essential to a *telling* leader, he ought to have congratulated himself on its reception and no doubt he willingly laid aside his own effort at editorial writing for the next week's issue.

In reply to Professor Frank H. Hamilton's letter to you, wherein he accuses me of misquotation and and misrepresentation, I have to say, that the doctor is simply in error. I will say again, as I said before, that he may have been wrongly reported, but I quoted him in good faith, and gave my authority. I may also have misunderstood his writings, and am willing to correct,

in due time, whatever I may have misapprehended; but I protest emphatically against his accusations towards me.

In my monograph (no copyright secured,) on "Fracture of the Femur," I left out the sentence offensive to Dr. Hamilton, out of courtesy to him; still he is not tranquilled. That I am not afraid of publishing my bad results and unsuccessful operations, is well-known.

The Doctor informs *us* (I will not use the words "the public," at least my writings are only intended for the profession,) that my principle is not new. I admitted that; neither is the method new, I said so explicitly in my paper, and that I was well aware that the flexed or inclined method had its faults. But the Doctor is again in error, when he says I claimed extraordinary results; he gets things mixed. There may be no need for new inventions, but there is much room for improvement in the old.

He then accuses four out of five nameless gentlemen of not having spoken the truth, and practicing a species of charlatanry, and directly afterwards boasts of his own broad charity. What can we think of one who claims to possess five times the amount of charity that belongs to an ordinary being thus accusing his professional brethren of so great and grave a crime? What would he do if his charity were reduced to one-fifth, or had none at all? Yet I must feel glad, that within the walls of Gotham there is so much christian virtue.

Prof. F. H. Hamilton, whom I have always highly esteemed, can rest assured, that in order to avoid "misquotation," on *either* side, I shall in future not quote him again, nor pay any attention to what his *lieutenants* may (?) write hereafter in his defence. I refer the profession to my articles in this JOURNAL for Jan., and March, 1878, and to my monograph on fracture of the femur, 1879, and to dates of Journals quoted therein, for their own decision.

Very Respectfully,

EDWARD BORCK, M. D.

3613 N. 9th Street

A CORRECTION.

ST. LOUIS, May 25th, 1879.

EDITOR JOURNAL:—In your most excellent journal of May, we find a review of Dr. Thomas Bryant's work on Surgery, by Dr. John T. Hodgen, wherein Dr. Bryant gives a quotation from John Simon's work on cancer, and adopted by Dr. Hodgen, proving that cancer is local in its origin. Here is the quotation from Simon, that these gentlemen rely upon to prove that Simon taught in his lectures upon cancer, that cancer is really local in its origin: "The author holds that cancer appears to be in its origin a local disease, and becomes general either by the juices of the primary tumor exercising an impregnative spermatic influence upon parts, or by dissemination of its elements, as taught by Simon." "The practical deduction from the theory of local origin is that" "the earlier a cancerous tumor is removed the better, and the better prospect for a cure." Now it is a matter of regret that Dr. Hodgen has never read Simon, for if he had, he would never have adopted Bryant's errors in relation to the teachings of Simon in regard to the origin of cancer. The truth is, that Simon never did anywhere teach that cancer was local in its origin, as stated by Bryant and Hodgen. Let us see what Simon did teach regarding the origin of cancer in his "Lectures on Pathology," where we find his opinions clearly stated by himself. "The cells of the tumor have grown like healthy gland cells, like the nucleated cells of a mucous membrane, only to discharge themselves with their contents. There is nothing, I repeat, like hypertrophy in the disease; it consists essentially in the establishment of a new rent, a new organ of elimination; and that organ developes itself according to the type of other secreting organs; it developes itself as an apparatus for formation of deciduous cells."

How constitutional, how intensely constitutional, is this eliminative action, can hardly be misunderstood. The mere fact that nature thus deliberately, and without any exterior provocation, organizes in one spot of the body a drain which becomes so ample, as to starve the remainder; the circumstance that this flux is not a single emptying out of some previous local accumulation, but is a persistent process, depending day by day on new acts of growth; the observation that the tendency to the disease is in many instances hereditary; the existence of a marked cachectical state which precedes, as well as accompanies the evolution of the tumor; and most of all, that flagrant evidence of metas-

tasis which daily renews itself for our instruction, consisting in the failure of surgical operations, by reason of the obstinate emergence of the disease, even again and again, in parts previously uncontaminated by its presence. These arguments are to my mind as conclusive for the constitutional and purely constitutional origin of cancer, as any which I could adduce to show the constitutionality of small-pox or gout." These views are to be found on pages 116 and 117.

I have made these extensive quotations from Simon, so as to show what he really did teach in regard to the local origin of the malignancy of cancer. It is a matter of regret, that the neuropathologists and the cellular pathologists, do not more thoroughly study Robin and Haickel on the origin of life, depending on the plastides and albuminoids for its existence. If these mechanical surgeons would take a little more time, and study the origin of the monad, and through them up to the highest organism, they would learn that there are forces and matter in nature which produce and develop cell life, and that by cutting out these cells, they can not cure the cause that produces that abnormal condition of constitutional cancer in the human system.

WILLIAM JOHNSTON.

702 Olive Street.

Periscope of Current Medical and Scientific Literature.

MATERIA MEDICA.

AMBLYOPIA FROM THE USE OF TOBACCO.—In a late article on this subject, M. Guéniot states as the result of his observations—

1. That the amaurosis of nicotin begins always in one eye, and never affects both eyes equally from the beginning. The patient sometimes sees objects yellow.

2. From the beginning the patient sees as in a mist, which gradually becomes more obscure. Along with this mist there exists a central scotoma.

3. There is at first a weakness in the central power of vision, while the peripheral perceptions remain normal.

4. Guéniot had never observed any especial pain or headache. The patients do not see so well toward the evening.

5. The pupils are almost always contracted and immovable.

Guéniot gives the following as the distinctive diagnosis between the amaurosis of nicotin and of alcohol. The amaurosis following the abuse of alcohol begins in both eyes at once, while that of nicotin is at first always unilateral. In both diseases there is central scotoma, but in the intoxication of nicotin alone are there muscæ volitantes. There is pain with the alcohol amaurosis, and the patient sees better toward the evening. The reverse is the case after amaurosis following the use of tobacco. Both diseases may end with atrophy of the papilla, but the amaurosis of nicotin progresses most quickly.—*Med. and Surg. Rep.*

MINIMIZING THE DANGERS OF ANÆSTHETICS.—In a late address, Dr. C. M. Tidy recommends the following precautions: (1) Choose in every case the safest anæsthetic, and first in our list stands nitrous oxide, then ether, and lastly, chloroform. We should not be justified in saying that the latter should never be used in dental operations, any more than we could say it is never to be used in any other operation, but its use should be confined to exceptional cases. (2) The anæsthetic should be administered at the patient's house. This applies more especially to ether and chloroform. (3) No anæsthetic should be administered except by a qualified medical man, and if possible, by an expert. (4) The operator should have nothing to do with the administration of the anæsthetic, and the administrator of the anæsthetic should have nothing to do with the operation. (5) If possible, a third qualified medical practitioner should be present, in the event of somethimg going wrong. (6) Everything that could possibly be required in the event of an accident, should be in readiness.

There can be but little doubt that of all means artificial respiration, and preferably by Sylvester's process, succeeds best in restoring a patient; and also galvanism, which has been somewhat pooh-poohed, has undoubtedly done good in such cases, and should never be left untried. But artificial respiration must never be abandoned during the time that galvanism is being tried.—*Med. and Surg. Rep.*

RELIEF OF PAIN FROM THE APPLICATION OF SULPHATE OF COPPER.—Dr. Pick, of Vienna, observes that it was by mere accident that he discovered the means of relieving the intense and enduring pain caused by the application of sulphate of copper in disease of the conjunctiva. As in purulent ophthalmia these applications have sometimes to be made daily, the relief of such suffering is of great importance. The plan consists in sprinkling calomel over the parts to which the sulphate has been applied, four or five minutes after they have been touched. The pain immediately diminishes; and after from three to six days of this procedure, the calomel may be applied immediately after the touching with the caustic, and then the pain instantly disappears. —*Med. and Surg. Rep.*

THE SECRET OF "METALLO-THERAPY."—As Professor Hammond very amply demonstrated in this (See REPORTER, vol. xxxix p. 539) the whole of Charcot's teachings about metallo-therapy is but a resuscitation of an old delusion. Dr. Carpenter, the physiologist, has recently shown, from another point of view, that it is an effect of attention and expectancy in nervous and hysterical subjects. It is marvelous how eminent and shrewd observers have been fooled anew by these long familiar phenomena. It is but a rehabilitation of Mesmer's doctrine of the magnetic fluid.—*Med. and Surg. Rep.*

THE purgative effects of hypodermic injections of aloin has been investigated by Dr. Fronmaeller, who states that a solution of one part of aloin in 25 parts of very warm water will have the same purgative effect, when injected hypodermically as when taken internally. Two injections are usually necessary to produce the desired effect in from 6 to 14, very rarely in 2 to 3 hours, there being scarcely any irritation and never an abscess caused, where injected. Hypodermic injections with extract of aloes (1 part in 10 parts of water) also proved efficacious, but produced a stronger inflammation, where injected, than aloin. —*Pharm. Post. Am. Jour. of Pharmacy.*

CHRYSOPHANIC acid has been recommended in England as a remedy for psoriasis and parasitic skin diseases, and was recently used successfully in several of the largest hospitals of Berlin. It appears in commerce as a yellow amorphous powder, possessing a peculiar strong odor, and is not soluble in water, scarcely soluble

in alcohol, but more so in ether; it does not answer the description of the pure acid, nor does it yield exactly the same reactions, and must therefore be considered an impure preparation.—*Pharm. Ztg.*

POISONING WITH SALICYLATE OF SODIUM.—Dr. Feltz reports the poisoning of a man who took 200 grams of salicylate of sodium in one month. He took 4 grams three times daily for seven days, then increased the dose to 6 grams, and, in the last 17 days to 8 grams three times daily. The intoxication symptoms were principally frequent vomiting and repeated attacks of very painful headache, preceded by reddening of the neck, face and head. His pupils were very much contracted and the symptoms continued for 17 days after the last dose of medicine had been taken, while the acid could be detected in the urine for 16 days.—*Ap. Ztg.*,

SALICYLIC ACID AGAINST TAENIA.—After trying almost all other remedies in vain, Marynowski administered to a lady who had suffered with tænia solium for nine years, 0.5 salicylic acid four times at intervals of one hour and then gave a tablespoonful of castor oil. This treatment proved painless and perfectly successful.—*Apoth. Ztg.*,

NEW DISINFECTANT.—An Australian physician, Dr. Day, recommends a mixture of 1 part of rectified oil turpentine, 7 parts of benzoin, and, to every ounce of the mixture, 3 drops of oil verbena for disinfecting clothes, furniture, carpets, wall paper, books, papers, etc., claiming that it does not injure the latter, while the oxidizing power is sufficiently great to cause the articles to retain the disinfecting properties for some time.—*Ap. Ztg.*, *Am. Jour. of Phar.*

THE INCOMPATIBILITY OF BISMUTH SUBNITRAS WITH THE ALKALINE BICARBONATES.—Although this subject has, both recently and on a former occasion, attracted much attention and comment, it can scarcely be said that it has been satisfactorily settled inasmuch as opinion seems divided as to whether the evolution of CO_2 from the alkaline bicarbonates is due to free acid in the bismuth subnitrate, or to the chemical action which the latter has on the former; the preponderance of opinion inclining to the former theory. Mr. Yeats, who, I believe, first drew attention to the subject, tested the bismuth he had used and finding it to be slightly acid, thought that might account for the explosion, but, however, added that the real cause was probably a decomposition between the two salts, and formed an equation representing such decomposition. It would appear that, independently of any free acid that may be present in subnitrate of bismuth, owing to insufficient washing (I) that an admixture of this bismuth salt with the alkaline carbonates or bicarbonates results in mutual decomposition; (2) that when the carbonates are used, decomposi-

tion without effervescence ensues; and (3) that when the bicarbonates are used, decomposition with liberation of CO_2 takes place.

The following equations will render these propositions intelligible:

$$_2BiONO_3+Na_2CO_3=Bi_2O_2CO_3+2NaNO_3.$$
$$_2BiONO_3+2NaHCO_3=Bi_2O_2CO_3+2NaNO_3+H_2O+CO_2.$$

In dispensing such mixtures it is clearly the duty of the compounder to complete as far as posible the decomposition before sending out the mixture. This may be partially effected by rubbing the two salts in a mortar with a little hot distilled water until the liquid is cold. But, whenever practicable, the attention of the prescriber should be drawn to the incompatibility and the substitution of the carbonate suggested.—*Phar. Jour. and Trans.*,

PURE SALICYLIC ACID AS A PRESERVATIVE OF DRINKING WATER.—Hugo Schiff states that 0.3 parts salicylic acid, added to 1,000 parts of drinking water containing much organic matter and kept in a stoppered bottle, which was opened from time to time, entirely prevented its decomposition, it tasting perfectly fresh at the expiration of three years. Water can also be prevented from decomposing by adding a minute quantity of bisulphide of carbon to it, or of phenol in salt water, but will then not be fit for drinking.—*Ber. d. deutsch. Chen. Ges.*

PRESERVATION OF SOLUTION OF GUM AND GELATIN.—M. Regensburg recommends adding 1 liter of the solution, in hot rain or distilled water, from 60 to 80 drops of silicate of soda, and stirring the mixture well for five minutes. If the solution has already commenced to decompose, it is heated, and to every 1-10 liter 14 drops of soluble glass are added.—*Pharm. Ztg, Oct. 23, 1878, p. 735, fr. Polyt. Notizbl.*

EASY METHOD FOR PREPARING LIQUOR FERRI DIALYSATI.—F. Schneider dissolves 300 grams of commercial crystallized ferric chloride 100.0 distilled water, and gradually adds 350.0 of caustic potassa (offic. Pharm. Germ.), in small quantities, waiting after each addition until the oxide of iron, which separates, redissolves, and adding a few drops of liquor ferri sesquichlorati, if necessary. He then dialyses the clear liquid, changing the water until silver solution no longer produces a reaction in the diluted iron liquid and scarcely any cloudiness in the water, determines the specific gravity of the liquid and reduces it with water to the required strength (5 per cent., 1.046 spec. grav.). The yield is about 1,900 grams, and from 12 to 14 days are required for the completion of the preparation.—*Schw. Wochenschr., Am. Jour. Phar.*

J. S. B. A.

Editorial.

THE MISSOURI STATE MEDICAL ASSOCIATION.

The eighteenth annual meeting at Columbia, was in some respects a success, in others a failure. It was well attended, as full delegations from different sections were present, that from St. Louis being the largest ever sent from that city to a medical convention. Societies never before represented sent those who did honor to the trust; notably the society of the Southeast, that for the first time sent a delegate, Dr. Henderson. New faces were seen from Macon City, Carthage and Cape Girardeau, as well as from less remote regions.

On the other hand, many were missed for whom there can be no substitute; Torry, Tefft, Trader, King, Catlett, Hodgen, Lester, Gregory, Johnston and many others who are always asked for, were absent. That the members were most hospitably entertained by the worthy citizens, is a matter of record. May our kind hosts always have the best physicians within call, but never need to call them.

A good deal of eagerness and "manipulation" were manifested in the matter of election. There was the "right" in favor of continuing in office those whose efforts had been felt in the Association for years; they were met by the members of the "left," who in friendly spirit, let us hope, determined a change. We are glad such a change was in part made; not that there was fault to find with any one—rather the thanks of the profession are due to the officers of the last few years for many things—but the election of the present President, removes all suspicion of a perpetuity of place and centralization of power. The Association is better off now, that that very transparent scheme, known as "the Committee on Nominations," has lost its prestige.

Another feature deserves comment. Except those from St. Louis, but three members offered papers or reports to the Association. The excuse from some, is that the St. Louis delegates claimed (or kept) the floor until they they were through, and then went home, having adjourned the society, and thus some half dozen papers were not presented for want of time. This is

in part valid. Our city members should see to it that they leave room for what many are so anxious about—the encouragement of the profession in the rural districts. We do not think, however, that there should be, or is, any sort of rivalry between city and country in our Association. All should work, and we suggest that during the next year, our members prepare papers early, the more the better, especially from the country; and let each send the title of his paper to the Chairman of the Committee on Scientific Communications, at least a fortnight before the time of meeting. We say, let the country doctors write; they comprise at least two-thirds of the membership, and all desire the greatest good to the greatest number; therefore let us have what pertains to general practice, rather than an array of "special," even though well displayed "notes" and "cases." The Association, like the JOURNAL, belongs to the whole profession, and not to any portion of it.

Again as to the place of meeting. This year at Columbia all was done, and next year at Carthage all will be done that is possible by the citizens and local profession, to give comfort and pleasure to the visiting members. It has been urged, however, that the Association should have a new place of meeting each year, in order to stimulate and organize the local societies, and such organizations will in turn benefit the State Association. Let us see. In '74 the Association met in Sedalia, and there was as far as we know, one delegate present this year; in '75 Jefferson City was "stimulated," and sent two delegates this year. in '77 Kansas City was "toned up," and sent two delegates this year. This is organization with a vengeance. If the Association depended upon circumgyration for success, in about twenty years the State would be so thoroughly "organized," that the Association would consist of a President and Secretary, who would continue in office for lack of anybody to put them out.

If the Association will select a suitable place as a permanency, and get up enough of interest to *draw*, there will be no need to go on a circuit to hunt up sinners and sleepers.

There are many reasons why the meetings should not be held in a large city; there are too many outside attractions; country members expect the city doctors to fill in the time with clinical cases, lectures, etc., while the city doctor will not give up his office hours. Thus our poorest meetings have been in St. Louis, while our best one was at Sweet Springs, where the members

had nothing else to do but to work, and found the advantage of all being under one roof. If the members are foolishly afraid of advertising (?) Sweet Springs, let us choose some other central accessible place for headquarters, and trust to the loyalty of local garrisons for recruits.

Finally as to the time of meeting. This is fixed by the by-laws, but can at any meeting be changed by a two-thirds vote. Why meet in the Spring? During the months of May and June, we have the meetings of the American Medical Association, of several special societies, and besides these, many of our number wish to attend the medical conventions in adjoining States. Most of these are held in the months mentioned. Shall we not after the next convention, change the time of meeting? If any of our readers will give us the benefit of his opinion in this matter or any other concerning the State Association, we will gladly make mention of it. Let each one who can get ready for Carthage, by preparing a short, systematic paper, thoroughly digested, and to be sure of it, begin now.

In conclusion, we wish to return our thanks to the friends of the JOURNAL for their hearty support and many expressions of their appreciation.

CHARCOT'S EXPERIMENTS.

The series of remarkable experiments which Prof. Charcot, the famous French neurologist, has been recently conducting in Paris, are exciting a widespread interest throughout the medical world, and are destined doubtless to create much further discussion and speculation. For although certain phases of the phenomena thus prominently developed in specially selected female "subjects" have long been known among lower animals, they have never challenged the attention or excited the interest with which Charcot has invested them. The fact that serpents have been able to "*charm*" birds; that by means of a *bull's-eye* lantern woodcocks and other varieties of game are *transfixed*, as it were, and thus easily captured, has hitherto been explained in a much more superficial manner than the experiments recently conducted at Salpétriére would seem to warrant. For the learned Professor seems to have demonstrated to the satisfaction of many whose testimony is entitled to the highest respect, that not only is a fixed gaze, or a strong light falling upon the retina, capable of

throwing certain hysterical patients into a cataleptic, or a somnambulistic state, but that the same conditions may be produced by certain vibrations upon the auditory centers,—thus demonstrating the old adage that "music hath charms" as well as light.

It is as yet premature to undertake to go fully into the physiological and pathological points necessarily involved in these experiments. At a future time we will attempt a more complete elaboration. Suffice it to say that Charcot himself does not as yet undertake to fully explain them. Although, as before remarked, he has succeeded in convincing many leading scientists and physicians, among others, it is said, the late Claude Bernard, of the genuineness of the observed phenomena, and of the entire good faith of the experimenter, still there are those who *doubt*. There are those who declare, in reference to Charcot and his followers, in the language of Bacon, that they "always observe where the event answers, but slight and pass by the instances where it fails, which are *much the more numerous*." Such seem to be the views of Schrœder, Westphal, Bennett and others of like prominence and authority, who have tried the same experiments upon similar subjects, and have utterly failed in the results obtained by Charcot.

There are certain considerations connected with these experiments as conducted by Dr. Charcot, which are not calculated to enhance the credulity or the respect of the skeptical. In the first place, it is unfortunate that he should retain the same subjects for repeated experimentation, which he seems to have done from the beginning; for according to Hughes Bennett the result depends largely upon a knowledge on the part of the patient of *what she is expected to do*. But the most reprehensible feature in the whole business is that he should issue tickets of admission to his performances, literally *to the public*. It is said that the young men in the shops of Paris are frequently heard jesting over the antics cut by these poor young women in their presence at La Salpétriére, on the previous Sunday.

These remarks are in no way intended to cast discredit upon the integrity of Charcot, a teacher to whom we are so largely indebted for his profound reasearches in neurolgy. But that he is not free from a little *hyper-enthusiasm* there is, we think, abundant reason to suspect. We trust, however, that there may be an outcome of practical fruit in all this, for unless these phe-

nomena,—granting that they may be produced by any person at will, on certain subjects,—can be utilized in the field of therapeutics, a knowledge of them will prove chiefly useful to the mountebank and for the designing ends of villainy.

STATE INSANE ASYLUMS—AN EXTRAORDINARY REPORT.

From the Albany, N. Y., *Argus* of the 26th ult. we learn that the Committee on Public Health, of the General Assembly of the State of New York, have made what might justly be termed a very extraordinary report on the petition of Dr. Wm. A. Hammond and others, alleging abuses in the State asylums.

The committee, in order to ascertain what grounds there were for justifying a detailed investigation of these institutions, directly interrogated the signers of the petition as to facts within their knowledge. The Superintendents of the asylums and the Commissioners in Lunacy were also summoned before them.

The result of that effort, says the *Argus*, entitles the report to be regarded as of an *extraordinary* character.

More than half the petitioners repudiate their signatures. Not a baker's dozen appeared, and of those who did, not one knew, or pretended to know, anything of his personal knowledge. None of the complainants have ever been in all of the State Asylums under the present management. Most of them had never been in any. Dr. W. A. Hammond had been in two, at intervals of eight and thirteen years; in the others, never. President Barnard and Prof. Draper, of New York, declare that they never signed their names. Many physicians and clergymen say they were induced to sign some other petition, and that the paper on which they signed has been piratically pasted to the petition under consideration, a petition which they never saw.

A large mercantile firm state that they recognize their signatures and those of twenty-one of their employes on a paper pasted on to the petition; but that that paper, containing those signatures, was a part of a testimonial of good character, which the firm had given to a departing associate (!) It had been cut off from that testimonial and tacked on to the asylum petition (!!) There were other piracies quite as flagrant. Several clergymen pitifully declare that they signed the petition on the representation of others. Other signers declare their signatures were asked for

local improvements, and carried without their knowledge to the pending petition.

In every case those signers know nothing of the matters they have apparently fathered. In every case they know of nobody who does know anything. We have no hesitation in saying that it is the most peculiar evidence ever taken by a Senate committee. Every one of the complaining witnesses is a self-proclaimed know-nothing on the facts of the State Asylums. They swear, however, at great length to theories of treatment, and with great personal antipathy to certain Superintendents of asylums. In support of their charges they bring nothing. They name no witnesses. They make no allusions to where evidence can be had. They merely antagonize one mode of treatment against another, and declare that the men who are Superintendents are not entitled to the reputation which they enjoy.

The report, after exhibiting facts like these, sums up the conclusion of the whole movement in very strong words, declaring the petition to be unsupported by a scintilla of evidence; the action and evidence of the few who come to the front to be an outrage on the honor of a decent and respected profession; the charges, so far as they can be made stand up in sight, to be not only unproved, but disproved; and the process of getting signatures to be an abuse of the right of petition which is beyond characterization. Malice, misrepresentation, ignorance and falsehood are made the bottom motives of the whole movement by the report. The light in which the report reveals charges-making and petition-getting, in a large sense, concerns public morals. In a particular sense, it concerns the medical profession's power to disavow and discipline those who are named and characterized in this most effective report.

DR. CHAS. S. TURNBULL, the translator of Prof. Arlt's recent work, of which a notice by Dr. John Green appeared in the May number of this journal, writes to the Doctor that the "inaccurate and misleading title" on the back of the volume appeared without his knowledge and only on a very small number of copies which were first sent out by the publishers for review. Dr. Turnbull writes further that the error was corrected by him immediately upon his discovery, and prior to our notice of it. The volume, as put on sale, is properly backed, "Arlt—Injuries of the Eye—Turnbull."

OWING to an oversight of the writer, the Publication Committee, the editor and the proof reader, Dr. Maughs' name was omitted from his case of "Enterocele Vaginalis Anterior," in our last issue. We republish it this month properly paged.

Book Notices and Reviews.

PARESIS OF THE SYMPATHETIC CENTERS, from Over-excitation of High Solar Heat, Long Continued and Suddenly Withdrawn, etc. So-called Malaria; Its Etiology, Pathogenesis, Pathology and Treatment. By CHARLES T. REBER, M. D. [St. Louis: Geo. O. Rumbold & Co., 1879, pp. 122; 12 mo.]

The writer of this work on *Thermal Paresis* assumes to deal with some very abstruse subjects, such as the maintenance of the body temperature, when the person is exposed to degrees far above and below the normal temperature of the body, 98° F. The protection of the body from deficient or excessive outside temperature is ascribed to a nerve center which presides over certain "activities," namely, respiration, circulation, and heat production. The author quotes approvingly from H. C. Wood, Jr., that this nerve center is located higher then the pons varoli. The following quotation will give the author's views in his own language: "That it resides somewhere in the centers of the sympathetic system, there should no longer be any doubt. They (the temperature centers) are intimately associated with the vaso-motor centers, unduly stimulated by the frequent calls upon them through the different nerves to maintain the normal temperature; the frequency and urgency of these calls suddenly changing from one to another condition, from hot to cold, and especially in the over-excitation by a high outside temperature, loaded with moisture, (thereby preventing free surface vaporization) their tone, potentiality, health, normal condition is altered, lowered; they become unduly irritable, and therein lies the fundamental cause of all diseases now known by the term malarial as well as the fundamental cause of many other diseases not so well marked by a distinct rigor, etc." (Page 30.) We apprehend the above is theory; and that an irritable condition of all diseases at present attributed to malaria is of course a bold position, but remains without sufficient proof. It is an interesting subject, and prolific of speculation.

The old term malaria answers as well perhaps as any other so long as it does not pretend to an explanation of the precise course of the so-called malarial fevers; and before adopting the new term *hyper therma* (page 35), as suggested by the author, more evidence must be supplied of *excessive heat* being the peculiar cause of these diseases. For while it may be "quite evident that the air, *per se*, has nothing to do with the production of the

diseases now known as the malarial diseases, it does appear to us that heat *per se* is equally insufficient to produce these peculiar and typical fevers.

Under pathology and symptoms we find an array of disturbances almost equal to Hahnemenn's list following some infinitismal doses. In giving, "type, rhythm, mode, form," there would scarcely seem to be a necessity for such lengthy quotations, for a practitioner of a quartery of a century's observation in a region of these peculiar affections should have ample observation himself.

The treatment is generally well chosen; the alkaloids, quinia, quinindia and chinonidia stand at the head, and are about equally effective. The subject is of great interest, and we welcome light from every source. The mechanical part of the book is decidedly well done, and would reflect credit on any publishing house.

H. Z. GILL.

INSANITY IN ANCIENT AND MODERN LIFE, WITH CHAPTERS ON ITS PREVENTION. By DANIEL HACK LUKE, M. D. [London:—Macmillan & Co., 1878.]

This interesting work was written with a view of calling attention to the great importance of warding off attacks of threatened insanity, and of pursuing such a rational course through life, as will tend greatly to diminish its prevalence. The author first gives us several very instructive chapters upon insanity among the ancients; the prehistoric nations; and then the Egyptians, the Jews, the Greeks and the Romans, and next of mental disease in modern life, among all classes, and states the reasons why insanity is much more common among the highly civilized nations, than among the semi-civilized, the savage and barbarous. He says that he will not enter into any lengthy argument as to whether insanity be on the increase in England or not, for no one can contradict the statement that the number of cases reported, holds a much higher ratio than formerly. Twenty years ago, there was one person reputed as insane for every 530 inhabitants, whilst the latest returns give one in every 370, but he attributes this great apparent increase, to the fact that much better provision is now made for the insane, and that cases accumulate in our asylums, because their lives are greatly prolonged by kind and judicious treatment. Still, apart from this, there evidently has been a great actual increase in the number of insane people, and the relative increase has very naturally been greater among the paupers and poorer classes, than among the well-to-do and the rich, because they have many more causes to drive them crazy. This fact proves that ignorance and want of mental exertion, is no protection against insanity, as many intelligent persons believe. The ignorant and debased are more likely to ac-

quire depraved habits that induce madness, (intemperance and debauchery of every kind,) than are the educated and refined, whose surroundings compel them to lead much more regular lives. Recklessness, drunkeness, poverty, misery and consequent bestiality, all conduce very greatly to mental derangement, whilst education, refinement and pleasant surroundings attend to physical and mental health and enjoyment, and ward off attacks of insanity. Intemperance is the most frequent of all the exciting causes of insanity; next comes domestic trouble and poverty. From twelve to fourteen per cent of all cases of mental derangement, are directly due to intemperence. The relation between crime and lunacy, more especially weak-mindedness, is very striking indeed, both in regard to the criminals themselves, their parents and their children. A very large number of criminals are mentally deficient, as has been amply proven.

Amongst the upper classes, moral and psychical causes, disappointed love, vanity and religious fanaticism among females, and business worry, pecuniary losses, and too close confinement to study, are amongst the most prominent causes among males. Idleness, and want of proper mental and physical exercise also tend to produce derangement of both mind and body. Monotonous study and mental cramming lead to the same unhappy condition. How important is it then, when one person out of *every three hundred of our population goes mad*, that we should pay close attention to general prophylaxis and to anto-prophylaxis. *Principiis obsta*, resist or stop the beginnings, is the grand remedy in the treatment of mental aberration. Let every intelligent man become aware of his own personal danger, or that of his friends or relatives, and let him take prompt measures to remove it. The Latin proverb is as true to day, as when first copied from the Greek of Euripides—*Quem Jupiter vult perdere dementat prius*. Sometimes the dire affliction gives no warning of impending danger, but in a flash blurs the mental vision, or what is far worse, blots it out forever. In a moment, a devoted wife or loving mother, or an affectionate child is changed to a raving maniac; to one who hates every person whom she previously loved, whose whole nature is altered, and whose mind is overwhelmed with the mental agony, which only dreaded despair or the terror of overpowering evil can concoct, and who by her affliction is consigned to a living tomb; dead to herself, dead to her friends; dead to reason, dead to everything but the horrid imaginations of a diseased brain. How incumbent then, it is for us to hear the first mutterings of the coming storm, and to arm ourselves against its terrible consequences.

The most harrowing descriptions of madness can never impress the uninitiated with sufficient vividness of the danger, which, like the sword of Damocles, hangs over us all. Personal experience, sad reality, blighted happiness and a blasted future with the almost universal futility of medical or moral treatment, can alone

convince us of what a hell insanity can make for us, and consign us to. Religion offers us no consolation. Its expounders never professed to understand the delicate mechanism of the brain, nor the laws which govern its healthy action, and hence as religion depends in most cases, upon blind faith, or the fertility of the imagination as the mind vainly gropes after truth, it causes far more insanity than it cures. The most intelligent men and the lovliest of women become a prey to this disease, whilst the most damnable devils escape. The infirmities of the father are visited upon the children to the third and fourth generation, and many of the strongest and best minds succumb to religious melancholy in the vain search for everlasting happiness and eternal rest, which is fraudulently alluring them to espouse the cause of Christ, but which only leaves them to bemoan their unhappy condition. No one but a knave or a fool will deny that the brain is the organ of the mind, and that it is affected by the condition of the whole organism. *Mens sana in corpore sano*, covers the whole case, but the truth is not fully appreciated by the profession or the public, and in the words of our author we repeat. Therefore must it again and again be dinned into their ears, that their thoughts, their perceptions, their reasonings, their feelings, their way of judging of truth itself, cannot be properly conducted unless this organ is supplied with healthy blood; unless it has a sufficient amount allowed to supply it with nutritive material, and replace those which it has consumed in its operations. * * * Nourishment, assimilation, discharge of effete matter; these are as necessary for the mind organ as for any other viscera of the human body. This marvellously constituted brain; they may ignore it, despise it, defile it, but they do it at their peril—and let them remember that whether the result is or is not actual madness, they will pay the penalty sooner or later in some form or other; they will not be permitted to escape the consequences of the infraction of the laws upon which its integrity hangs. Mental rest, cheerfulness, avoidance of religious fanaticism, and all the other issues of the day; avoidance of too great haste; haste to travel, haste to grow rich, hurrying through life as though we lived only for the present; keeping up such a high degree of mental pressure, that even the successful man who has gained *much to retire upon, has nothing to retire to.* So also poverty, want of proper, nourishing food, want of cleanliness, abstention from the use of intoxicating liquors, marriage between near relations, all claim the attention of the learned author. The work is instructive, free from all the nonsensical speculation of *insane doctors*, and written in a pleasing style, and although it contains nothing about the varied vagaries which so much delight the *so-called specialists* upon mental diseases, it will repay every intelligent physician and layman who may read it.

THOS. KENNARD.

A CLINICAL TREATISE ON DISEASES OF THE LIVER. By FRIED. THEOD. FRERICHS, M. D., Professor of Clinical Medicine in the University of Berlin. Translated by CHARLES MURCHISON, M. D., F. R. C. P., Physician to the London Fever Hospital, Etc. In three volumes. [New York: Wm. Wood & Co., 27 Great Jones street. 1879.]

Although this is decidedly the most instructive, thorough and readable work that has ever been written upon diseases of the liver, and although it was translated for the New Sydenham Society, twenty-one years ago, by Charles Murchison, M. D., of London, and has long since taken rank as a classical work, still it is not so well-known to the mass of the profession as it should be. A generation of physicians have grown up since its first appearance, and Wm. Wood & Co., of New York, have shown good judgment in issuing an edition as one of the number of valuable works which they are furnishing the profession at a very trifling cost. It furnishes the student and general practitioner with all the really useful knowledge that we have upon the subject of which it treats, and the author differing from most German writers, does not discard therapeutics, but points out the most approved methods of treating every disease of the liver. It is a cyclopædia filled with valuable information, and as it has not been superceded in twenty-one years, it is not likely to be surpassed very soon by anything that may appear on the subject. Having been familiar with the work since the first English edition appeared, I can most cordially recommend it as the very best work accessible to us upon the subject. THOS. KENNARD.

THE VALUE OF ABSENT TENDON REFLEX AS A DIAGNOSTIC SIGN IN LOCOMOTOR ATAXIA, WITH AN ANALYSIS OF EIGHT CASES. By ALLAN MCLANE HAMILTON, New York. [Reprint from the *Boston Medical and Surgical Journal* for Dec. 19th, 1878.]

The Doctor's analysis of eight cases coming under his observation in the New York Hospital for Epileptics and Paralytics shows Westphal's diagnostic sign to have been *absent* from and *present* in four cases. In one, the tendinous reflexion was "increased in marked degree." Dr. H. also refers to two cases reported by Dr. H. M. Bannister, in the *Journal of Mental and Nervous Diseases* for October, and to cases reported by Gowers and Sawyer, at the meeting of the British Medical Association at Bath, last year.

He concludes that "it would seem, therefore, as if the absence of the particular tendon reflex is not so valuable a diagnostic as it has been said to be in the disease under consideration, but there can be no doubt of the fact that when its absence is coupled

with the so-called lightning pains, plantar anæsthesia and dimness of vision, there is reason for apprehension."

He thinks the occurrence of tendinous reflexion in some cases and its absence in others, "must depend, of course, upon the location of the affected regions of the posterior columns." It is quite possible," he says, "that one of the kinds of fibers described by Clarke is affected while the other remains *intact*, and for the fact attested by most observers, that the *funiculi cuniati* are primarily attacked, it seems reasonable to suppose that the horizontal fibers, which probably eventually end in the gray matter of the posterior horns, are those impaired in cases in which the tendon reflex has been extinguished."

This conjecture might be tenable but for the undoubted fact of its occasional absence, at least in healthy persons, as admitted by Dr. Westphal, and observed recently by Bannister, and by myself, and of its undoubted variability in persons without any spinal disease whatever. Bannister found it absent in two out of thirty-six persons examined. [See *Jour. Med. and Nerv. Diseases*, Oct., 1878.] I have failed to elicit it in three healthy men during the year.

C. H. HUGHES.

CHEMISTRY: GENERAL, MEDICAL AND PHARMACEUTICAL, including the Chemistry of the U. S. Pharmacopœa. A Manual on the General Principles of the Science and their Application in Medicine and Pharmacy. By JOHN ATTERFIELD, M. A. and Ph. D. of the University of Zübingen; Member of the Councils of the Institute of Great Britain and Ireland, and (lately) of the Chemical Society of London; Professor of Practical Chemistry to the Pharmaceutical Society of Great Britain, etc., etc. Eighth edition; revised by the author. Pp. 692; heavy 16mo. [Philadelphia: Henry C. Lea, 1879.]

The short title on the back of a book, and even the words on the title page, are generally, and even necessarily, imperfect descriptions of the contents, and hence not unfrequently induce, at the outset, misconceptions in the minds of readers. The author of "Chemistry, Medical and Pharmaceutical," would at once state, therefore, that his sole aim is to teach the general truths of chemistry to medical and pharmaceutical pupils.

According to the author's opinion, he has treated the subjects in that way in which he thinks will best meet the requirements of medical and pharmaceutical students in Great Britain, Ireland, America and English Colombia.

He has devoted his introductory pages to a few leading properties of the elements. An opportunity is in this way afforded for stating the views of philosophers respecting the manner in which the elements influence each other as components of ter-

restrial matter. Then follows the consideration of the relations of the elementary and compound radicals in detail; their synthetical and analytical bearings are pointed out. He next considers the chemistry of substances naturally associated in vegetables and animals; then he gives practical toxicology and the chemical as well as the microscopical character of morbid urine, urinary sediments and calculi.

On Spasmodic Stricture of the Urethra. A Reply to Dr. F. N. Otis. By HENRY B. SANDS, M. D.

Inhalations in the Treatment of Pulmonary Diseases. By. F. H. DAVIS, M. D., Chicago, Ill. [Reprint from Detroit Lancet, May, 1879.]

Diphthonia Paralytica. By ETHELBERT C. MORGAN, A. B., M. D. [Reprint from the National Medical Review, April, 1879.]

Urethrismus or Chronic Spasmodic Stricture. By F. N. OTIS, M. D. [Reprint from the Hospital Gazette, April 19th, 1879.]

Experiments with Living Human Beings. By GEORGE M. BEARD, M. D. [Reprint from the Popular Science Monthly, March and April, 1879.]

The Therapeutical Society of New York. [Reprint from the New York Medical Journal, April, 1879.]

Thirty-Third Annual Announcement of Starling Medical College, together with Catalogue and order of College and Hospital Exercises, for the Session of 1879–80. Columbus, Ohio.

Sixty-Seventh Annual Catalogue of the Officers and Students of Hamilton College, for the Academic Year. 1878–79.

The Difficulties and Dangers of Battey's Operation. By GEORGE J. ENGELMANN, M. D. [Extracted from the Transactions of the American Medical Association.]

Memorial Address on the Life, Character and Death of Dr. John Lay Cook, of Henderson, Ky., who died at Hickman, Ky., of Yellow Fever, October 1, 1878. By J. W. SINGLETON, M. D., Paducah, Ky. [Reprinted from the American Practitioner, Mar., 1879.]

Minutes of the Meeting of Organization and Proceedings of the Sanitary Council of the Mississippi Valley. Memphis, April, 30, May 1; Atlanta, May 5–9.

On the Permanent Removal of Hair by Electrolysis. By GEORGE HENRY FOX, A. M., M. D. [Reprint from the Medical Record, March 22, 1879.]

METEOROLOGICAL OBSERVATIONS.

By A. WISLIZENUS, M. D.

The following observations of daily temperature in St. Louis are made with a MAXIMUM and MINIMUM thermometer (of Green, N. Y.). The daily minimun occurs generally in night, the maximum at p. m. The monthly mean of the daily minima and maxima added and divided by two, gives quite a reliable mean of the monthly temperature

THERMOMETER, FAHRENHEIT—MAY, 1879.

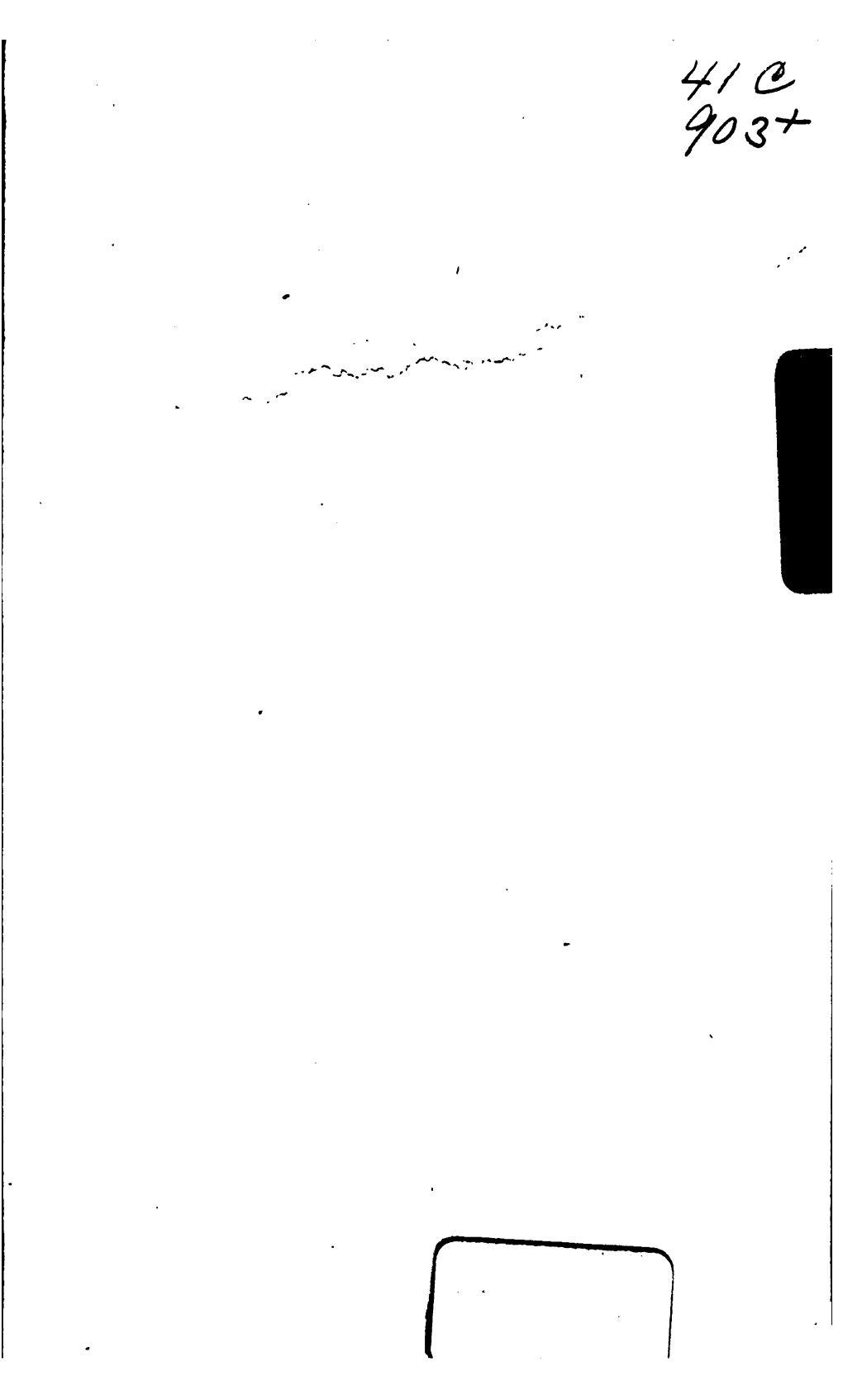
Day of Month	Minimum.	Maximum.	Day of Month	Minimum.	Maximum.
1	48.0	70.0	18	58.0	83.0
2	50.5	76.0	19	62.5	89.0
3	56.5	79.5	20	69.0	89.0
4	61.0	76.0	21	63.0	82.0
5	55.0	70.0	22	55.0	78.0
6	47.0	66.0	23	60 0	84.0
7	47.0	68.0	24	65.0	93.0
8	48.5	71.0	25	75.0	95.0
9	54.0	77.5	26	75.0	94.0
10	57.0	89.0	27	61.0	80.0
11	67.5	95.5	28	66.5	94.0
12	71.0	92.0	29	71.0	93.0
13	68.0	86.0	30	71.5	81.0
14	62.0	73.0	31	71.5	83.0
15	54.0	62.0			
16	52.0	64.5	Means	60.7	80.9
17	55.0	76.5	Monthly Mean	70.8	

Quantity of rainfall, 0.89 inches.

MORTALITY REPORT.---CITY OF ST. LOUIS.

FROM APRIL 20, 1879. TO MAY 17, 1879. INCLUSIVE.

Septicæmia	2	Cholera Infantum	0	Hydrocephalus & Tubercular Meningitis	2	Apoplexy	6
Measles	3	Inanition, Want of Breast Milk, etc.	28	Meningitis and Encephalitis	12	Canysis and Atelectasis	2
Syphilis Cong'al	1	Alcoholism	4	All Diseases of the Brain and Nervous System	21	Premature & Preternatural Birth	10
Scarlatina	2	Rheumatism and Gout	3	Cirrhosis of Liver and Hepatitis	12	Surgical Operat'ns	
Pyæmia	2	Cancer	10	Enteritis, Gastro-Enteritis, Peritonitis, and Gastritis	12	Deaths by Suicide	6
Erysipelas	3	Phthisis Pulmon	55	Bright's Disease and Nephritis	3	Deaths by Accid't	13
Diphtheria	9	Bronchitis	11	Other Diseases of Urinary Organs	5		
Membranous Croup	2	Addison's Disease	1	Recto-Pharyngeal Abscess		Total Deaths from all Causes	368
Whooping Cough	1	Pneumonia	3			Total Zymotic Diseases	90
Gangrene	9	Heart Diseases	1			Total Constitutional Diseases	83
Typhoid Fever	6	Other Diseases of Respir'y Organs	16			Total Local Diseases	164
Cerebro Spinal Fe.	1	Entro-Colitis				Total Develop'tal Diseases	12
Remittent, Intermittent, Typho-Malarial, Congestive and Simple Continued Fevers	14	Marasmus — Tabes Mesenterica and Scrofula	10			Deaths by Viol'ce	19
Puerperal Disea's.	8	Convulsions	14				
Diarrhœal "	4	Aneurism	1				

CHAS. W. FRANCIS, *Health Commissioner.*

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